

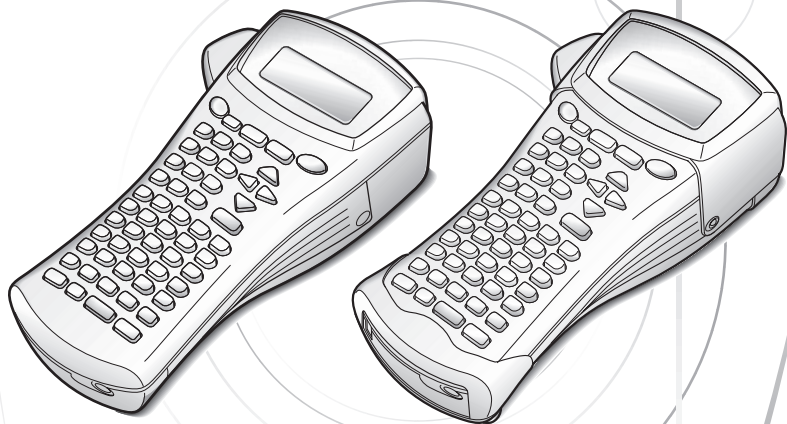
brother®

TZ
TAPE

P-touch

1400/1650

USER'S GUIDE



- Read this User's Guide before you start using your P-touch.
- Keep this User's Guide in a handy place for future reference.

Introduction

Thank you for purchasing the P-touch!

Your new P-touch will allow you to create labels for any need. Its versatility enables you to design custom labels by choosing from a variety of frame designs, characters sizes and styles. In addition, the five tape widths (6 mm, 9 mm, 12 mm, 18 mm and 24 mm) and variety of tape colours allow you to print personalised labels, useful for colour-coded filing.

You no longer have to worry about urgent tasks that require professional printing. In the office, the factory, the lab and the home, the quality and performance of the P-touch makes it an extremely practical machine.

Finally, as you may want to refer to this User's Guide occasionally, we suggest that you keep it in a handy place.

Brother only recommends the use of genuine Brother accessories (AC adapters, TZ Tapes) designed exclusively for this product. The use of non-genuine accessories may result in print quality issues and may damage your Brother product. Any such damages resulting from the use of non-genuine accessories will not be covered by warranty. Brother can only recommend the use of genuine Brother accessories in Brother products to ensure the operation is within the product design and specifications.

Genuine accessories are obtainable through your nearest Authorised Brother Reseller.

(Only for Australia)

Nothing contained in this statement shall be deemed to restrict any warranty required to be given under the Trade Practices Act (Commonwealth of Australia) or any consumer legislation of any state of Australia.

CONTENTS

1. Getting Started	1
General Description	1
<i>Top view & bottom view</i>	<i>1</i>
<i>Keyboard & LCD display</i>	<i>2</i>
General Precautions	4
Batteries & Tape Cassettes	5
<i>Installing batteries and a tape cassette</i>	<i>5</i>
Cleaning	8
<i>Cleaning the print head, rollers and tape cutter</i>	<i>8</i>
Optional AC Adapter	9
<i>Connecting the AC adapter</i>	<i>9</i>
Turning the P-touch On/Off	9
2. Label Type Modes	10
Selecting a Label Type Mode	10
Normal and Vertical Modes	10
Rotate Mode and Rotate & Repeat Mode	11
Flag Mode	12
Port & Panel Modes	13
3. Basic Functions	15
Performing Basic Operations	15
<i>Choosing functions, parameters, settings and groups</i>	<i>15</i>
<i>Choosing the default setting</i>	<i>15</i>
<i>Confirming a choice</i>	<i>15</i>
<i>Cancelling a choice</i>	<i>15</i>
Inputting Label Data	16
<i>Entering and editing text</i>	<i>16</i>
<i>Entering an accented character</i>	<i>18</i>
<i>Entering a bar code</i>	<i>19</i>
<i>Entering a symbol</i>	<i>21</i>
Formatting the Label	24
<i>Specifying a label length</i>	<i>24</i>
<i>Specifying a margin size</i>	<i>24</i>
<i>Framing the text</i>	<i>25</i>

<i>Specifying the character size</i>	26
<i>Specifying the character width</i>	27
<i>Specifying the character style</i>	28
<i>Using the pre-formatted Auto Format templates</i>	30
Printing Labels	31
<i>Previewing the label layout</i>	31
<i>Feeding tape</i>	31
<i>Printing a label</i>	31
<i>Using special printing functions</i>	32
Storing and Recalling Files	36
<i>Storing label text</i>	36
<i>Recalling text that has been stored</i>	37
<i>Deleting text that has been stored</i>	37

4. Machine Adjustments 38

<i>Selecting how tape is fed and cut</i>	38
<i>Adjusting the display contrast</i>	38
<i>Setting the Auto Reduction function</i>	39
<i>Calibrating the label length</i>	39
<i>Specifying if the PERSONAL symbol category is continually updated</i>	40
<i>Changing the units of measure</i>	40
<i>Changing the language</i>	40
<i>Displaying version information</i>	40

5. Using P-touch With a Computer (for PT-1650 only) ...41

Installing the Software & Printer Driver	42
<i>Before installation</i>	42
<i>Installing the P-touch Editor 3.2 software</i>	43
<i>Installing the USB printer driver</i>	44
Reading the User's Guide	46
Using P-touch Editor 3.2	47
<i>Starting up P-touch Editor 3.2</i>	48
<i>Displaying the Properties</i>	48
<i>Entering text</i>	49
<i>Notes on usage</i>	49
Transferring Data To/From a Computer	50
<i>Entering Transfer mode</i>	50
<i>Downloading data to the P-touch</i>	51
<i>Adding a user-defined character image to the text</i>	52
<i>Using template data</i>	52

<i>Using downloaded database data</i>	<i>54</i>
<i>Backing up/restoring P-touch data</i>	<i>57</i>

6. Appendix 58

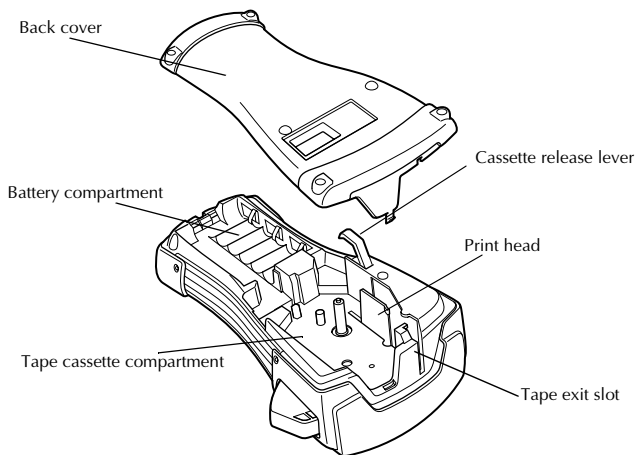
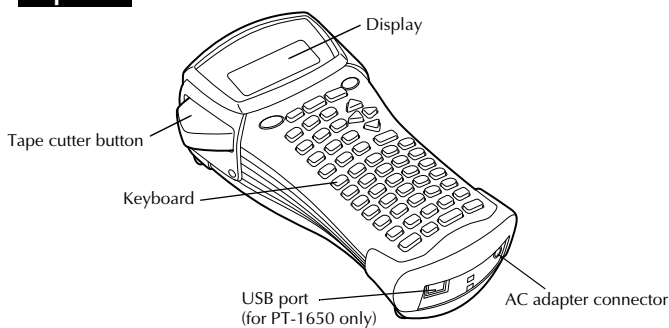
Troubleshooting	58
Error Message List	59
Machine Specifications	63
<i>Hardware</i>	<i>63</i>
<i>Software</i>	<i>63</i>
Accessories	64
Index	68

1 Getting Started

General Description

Top view & bottom view

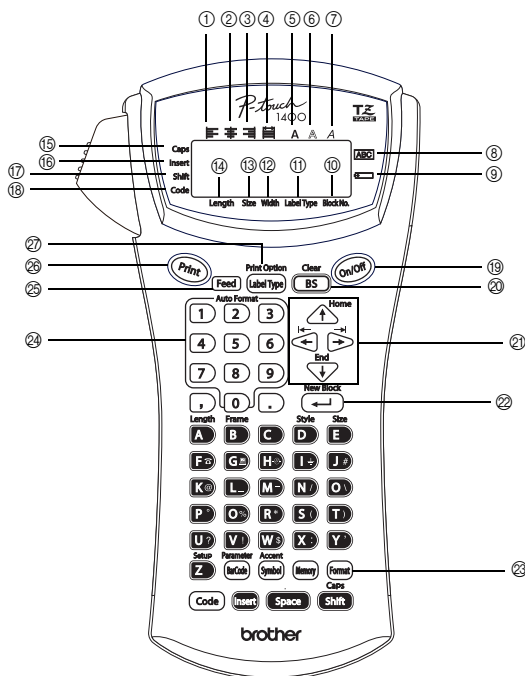
Top view



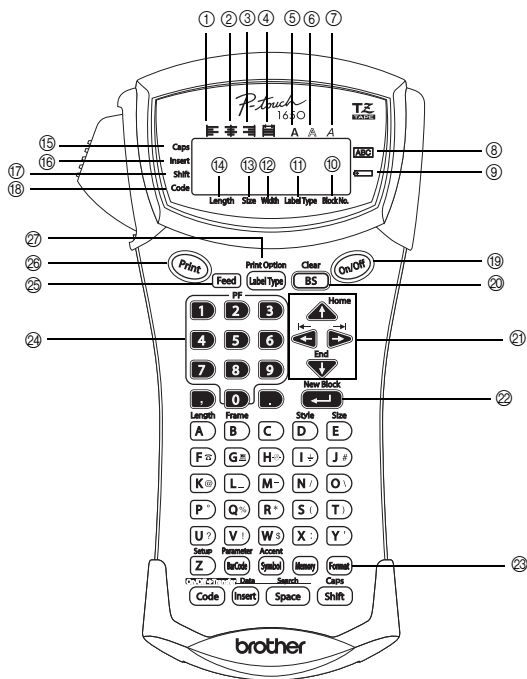
Bottom view

Keyboard & LCD display

PT-1400



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|--------------------------------------|---------------------------------|
| ① Left text alignment (page 29) | ⑮ Caps mode (page 16) |
| ② Center text alignment (page 29) | ⑯ Insert mode (page 17) |
| ③ Right text alignment (page 29) | ⑰ Shift mode (page 16) |
| ④ Justified text alignment (page 29) | ⑱ Code mode (page 16) |
| ⑤ Bold text style (page 28) | ⑲ Power key (page 9) |
| ⑥ Outline text style (page 28) | ⑳ Backspace key (pages 15 & 18) |
| ⑦ Italic text style (page 28) | ㉑ Arrow keys (page 15) |
| ⑧ Frame (page 25) | ㉒ Return key (pages 15 & 17) |
| ⑨ Low battery (page 6) | ㉓ Global format key (page 26) |
| ⑩ Block number (page 17) | ㉔ Auto Format keys (page 30) |
| ⑪ Label Type setting (page 10) | ㉕ Feed key (page 31) |
| ⑫ Width setting (page 27) | ㉖ Print key (page 31) |
| ⑬ Size setting (pages 26 & 27) | ㉗ Label Type (page 10) |
| ⑭ Length setting (page 24) | |



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|--------------------------------------|---------------------------------|
| ① Left text alignment (page 29) | ⑮ Caps mode (page 16) |
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| ③ Right text alignment (page 29) | ⑰ Shift mode (page 16) |
| ④ Justified text alignment (page 29) | ⑱ Code mode (page 16) |
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| ⑦ Italic text style (page 28) | ㉑ Arrow keys (page 15) |
| ⑧ Frame (page 25) | ㉒ Return key (pages 15 & 17) |
| ⑨ Low battery (page 6) | ㉓ Global format key (page 26) |
| ⑩ Block number (page 17) | ㉔ PF keys (page 30) |
| ⑪ Label Type setting (page 10) | ㉕ Feed key (page 31) |
| ⑫ Width setting (page 27) | ㉖ Print key (page 31) |
| ⑬ Size setting (pages 26 & 27) | ㉗ Label Type (page 10) |
| ⑭ Length setting (page 24) | |

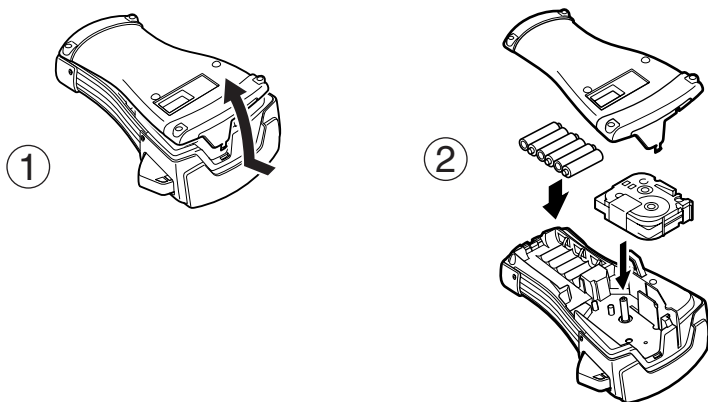
General Precautions

- Use only **Brother TZ tapes with this machine. Do not use tapes that do not have the  mark.**
- Do not pull on the tape being fed from the P-touch, otherwise the tape cassette may be damaged.
- Avoid using the machine in extremely dusty places. Keep it out of both direct sunlight and rain.
- Do not expose the machine to extremely high temperatures or high humidity. Never leave it on the dashboard or in the back of your car.
- Do not store tape cassettes where they would be exposed to direct sunlight, high humidity or dust.
- Do not leave any rubber or vinyl on the machine for an extended period of time, otherwise the machine may be stained.
- Do not clean the machine with alcohol or other organic solvents. Only use a soft, dry cloth.
- Do not put any foreign objects into or heavy objects on the machine.
- To avoid injuries, do not touch the cutter's edge.
- Use only the AC adapter designed exclusively for this machine. Use of any other adapter will void the warranty.
- Do not try to disassemble the AC adapter.
- When the machine is not to be used for a long period of time, disconnect the AC adapter, and remove the batteries to prevent them from leaking and damaging the machine.
- Use six AA alkaline or rechargeable (Ni-Cd or Ni-MH) batteries.
- Never try to disassemble the P-touch.
- It is recommended that you use the USB cable supplied with the P-touch. Should another USB cable need to be used, ensure it is of high quality construction (for PT-1650 only).
- IBM® and PC-DOS® are trademarks of International Business Machines, Inc (for PT-1650 only).
- Microsoft® and Windows® are registered trademarks of Microsoft Corp. in the US and other countries (for PT-1650 only).
- All other software and product names mentioned are trademarks of registered trademarks of their respective companies (for PT-1650 only).
- Portions of the graphics filter software are based in part on the work of the Independent JPEG group (for PT-1650 only).

Batteries & Tape Cassettes

This machine has been designed to allow you to change the batteries and tape cassettes quickly and easily. With batteries installed, this compact and portable machine can be used anywhere. TZ tape cassettes are available for this machine in a wide variety of types, colours and sizes, enabling you to make distinctive colour-coded and stylized labels.

Installing batteries and a tape cassette



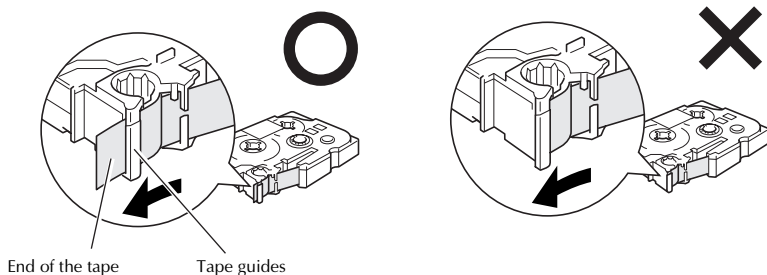
Notes on batteries

- ☞ **This P-touch requires six AA-size batteries. Rechargeable (Ni-Cd or Ni-MH) batteries can be used instead of six alkaline batteries.**
- ☞ The rechargeable batteries cannot be recharged by leaving them in the P-touch with the AC adapter connected. Instead, recharge the batteries by using a battery charger designed specifically for the type of batteries used. For more details on the rechargeable batteries, refer to the instructions provided with them.
- ☞ Do not use any of the following, otherwise battery leakage or damage may occur.
 - Manganese batteries
 - A combination of new and used batteries
 - A combination of batteries of different types (alkaline, Ni-Cd and Ni-MH), different manufacturers or different models
 - A combination of recharged and uncharged batteries

- Make sure that the batteries are inserted so that their poles point in the correct direction. With batteries installed, the P-touch determines the remaining battery charge during printing and feeding. If a low battery charge is detected, the low battery indicator () comes on. When this occurs, be sure to replace the batteries. The low battery indicator may not come on in some operating conditions.
- Before replacing the batteries, make sure that the P-touch is turned off. In addition, when replacing the batteries, insert the new ones within five minutes of removing the old ones, otherwise the text shown in the display and any text stored in the memory will be lost.
- If you do not intend to use this P-touch for an extended period of time, remove the batteries. When the power is disconnected, all text shown in the display and stored in the memory will be lost.
- Since the enclosed batteries begin discharging from the time that the unit is shipped from the factory, their life span may not meet specifications, depending on when the unit is put into use.

Notes on tape cassettes

- Before installing the tape cassette, make sure that the end of the tape feeds under the tape guides. If the tape cassette to be installed has an ink ribbon and the ink ribbon is loose, use your finger to wind the toothed wheel in the direction of the arrow on the cassette until there is no slack in the ribbon.



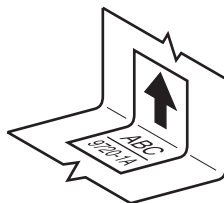
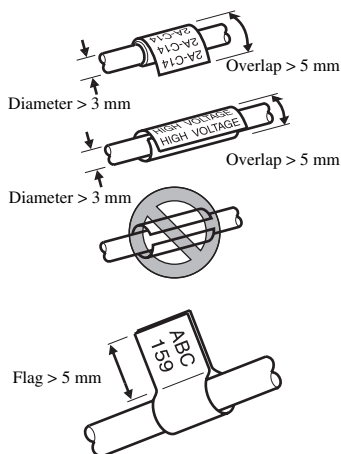
- When inserting the tape cassette, make sure that the inner ribbon does not catch on the corner of the metal guide.
- After installing a tape cassette, press **Feed** once to remove any slack in the tape, and then press in on the tape cutter button to cut off the excess tape.
- Always cut off the tape before removing it from the machine. If the tape is pulled on before being cut off, the tape cassette may be damaged.

Strong Adhesive Tape

- For textured, rough, or slippery surface, we recommend using Strong Adhesive Tape.
- Although the instruction sheet included with the Strong Adhesive Tape cassette recommends cutting the tape with scissors, the tape cutter that this P-touch is equipped with is able to cut Strong Adhesive Tape.

Flexible ID Tape

- For applications that require more flexible labels, such as around sharp bends and cylindrical objects, we recommend using Flexible ID Tape.
- Labels made with Flexible ID Tape are not designed for use as electrical insulation.
- When wrapping labels around cylindrical objects, the diameter of the object should be at least 3 mm, otherwise the label should be wrapped as a flag and the **FLAG** Label Type mode should be used. In addition, the overlapping ends of the label or the label flag should be at least 5 mm.
- The label may peel off cylindrical objects if the object is bent after the label is affixed.

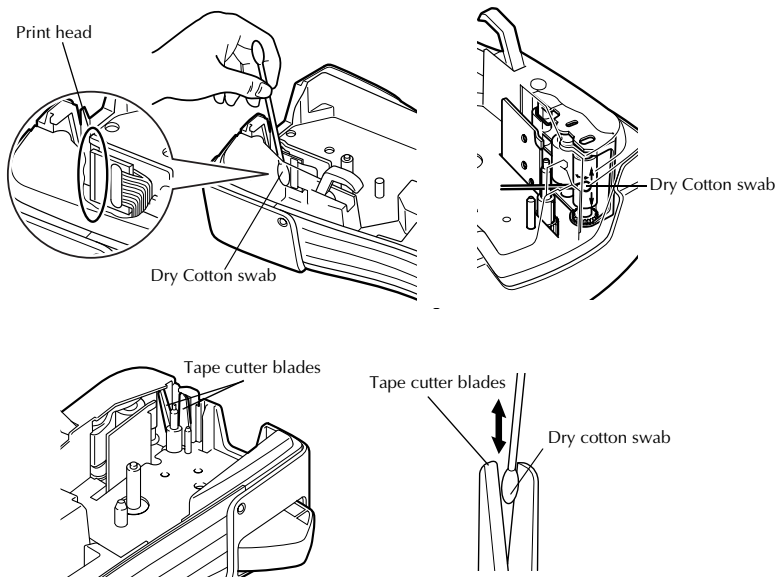


Cleaning

Occasionally, certain parts of the P-touch may need to be cleaned. Dust or dirt may become attached to the P-touch's print head and rollers, particularly when the unit is used outdoors or in a very dusty environment. With use, the tape cutter may become covered with adhesive, making it difficult to cut the tape.

Cleaning the print head, rollers and tape cutter

- ⚠ Before cleaning the print head and rollers, press **On/Off** to turn off the P-touch, and then remove the batteries and disconnect the optional AC adapter.
- ⚠ Be extremely careful not to touch the cutter blades with your fingers.



Notes on cleaning the print head & rollers

- ⚠ If a blank horizontal streak appears through the label text, clean the machine's print head.
- ⚠ The print head can be cleaned more easily if the optional print head cleaning cassette (TZ-CL4) is used.

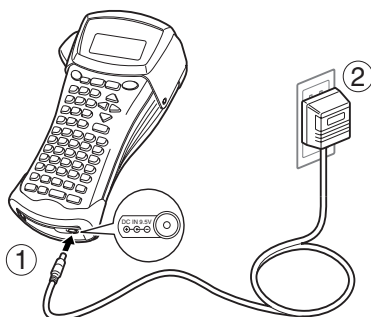
Notes on cleaning the tape cutter

- ✎ If the tape cannot be cut correctly, clean the tape cutter blades.

Optional AC Adapter

When printing a large number of labels or labels that contain a large amount of text, it may be useful to connect the P-touch to a standard electrical outlet using the optional AC adapter.

Connecting the AC adapter



Notes on the AC adapter

- ✎ Only use the AC adapter designed exclusively for this machine.
- ✎ Disconnect the AC adapter if you do not intend to use this P-touch for an extended period of time. When the power is disconnected, all text shown in the display and stored in the memory will be lost.

Turning the P-touch On/Off

Press **On/Off** to turn on or turn off the P-touch.

If batteries are installed or the P-touch has remained plugged in using the AC adapter, the previous session's text is displayed when the P-touch is turned on again. This feature allows you to stop work on a label, turn off the machine, and return to it later without having to re-enter the text.

Regardless of whether the P-touch is being operated from batteries or the AC adapter, the machine will automatically turn off if no key is pressed or no operation is performed for 5 minutes.

2 Label Type Modes

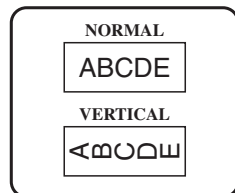
Selecting a Label Type Mode

Pressing  allows you to select one of the two regular modes for designing and printing your own custom labels, or any of the six special modes available for printing labels pre-formatted for identifying patch panels, cables, connectors and other components.

- 1 Press .
- 2 Press  or  (or continue pressing ) until the desired mode is displayed. (For details on each Label Type mode, refer to the sections below.)
- 3 Press  to apply the selected Label Type mode.
 - If **NORMAL** or **VERTICAL** was selected, continue entering the label text as described in chapter 3, *Basic Functions*.
 - If **ROTATE**, **ROT-REP**, **PORT**, **PANEL**, or **FLAG** was selected, continue with the following steps.
- 4 Press  or  until the desired parameter is displayed.
- 5 Press  or  until the desired setting is displayed (or use the number keys to type in the desired setting).
- 6 Press  to apply the selected settings.
- 7 Type the text for each label in a separate text block.
- 8 Print the labels.
 - To print a single copy of each label, press .
 - To print multiple copies or several copies while increasing certain characters, or to print using any other special printing function, press , then  and choose your options. (For details, refer to *Using special printing functions* on page 32.)

Normal and Vertical Modes

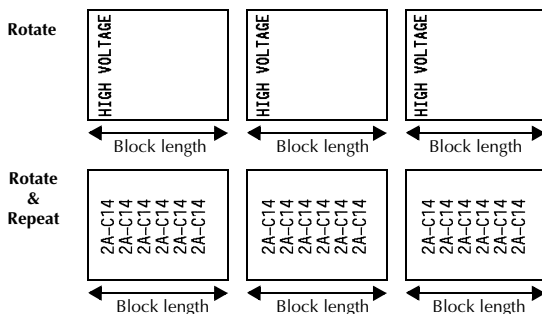
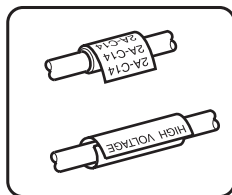
Labels printed using the **Normal** and **Vertical** Label Type modes can be formatted and printed to fit any need.



After selecting the Label Type mode **NORMAL** or **VERTICAL**, the label text can be entered, formatted, printed and cut as usual. With the **Normal** Label Type mode, the entered text is printed horizontally along the label. With the **Vertical** Label Type mode, the entered text is printed vertically along the label.

Rotate Mode and Rotate & Repeat Mode

Labels printed using these Label Type modes can be wrapped around cables and wires to mark them. With both of these modes, the text is rotated 90° counterclockwise and each text block printed on a separate label as shown below. With the Rotate & Repeat mode, the text is printed repeatedly along the length of the label so that it can easily be read from any angle.



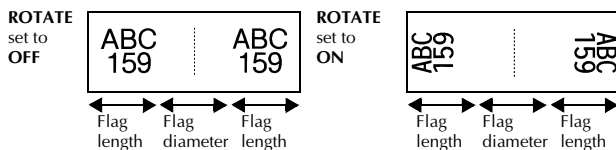
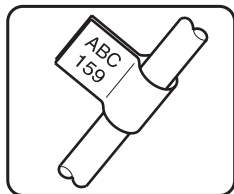
After selecting the **ROTATE** or **ROT-REP** Label Type mode, specify the length of each label and a frame style if desired.

- **BLK LEN.** (block length): 20 to 200 mm
Default: 30 mm
- **FRAME:** OFF, ☐ 1, ☒ 2, ☐ 3, ☐ 4
Default: OFF

- ⓘ A single block of text can contain a maximum of 7 text lines, and with the **ROT-REP** Label Type mode, only the text lines that fit within the label are printed.
- ⓘ For labels to be attached to cables and wires, we recommend using Flexible ID Tape. When wrapping Flexible ID Tape around cylindrical objects, the diameter of the object should be at least 3 mm, otherwise the **FLAG** Label Type mode should be used. In addition, the overlapping ends of the label or the flag length should be at least 5 mm.

Flag Mode

Labels printed using this Label Type mode can be wrapped around cable or wire with the ends stuck together to form a flag. With the **FLAG** Label Type mode, each block of text is printed at both ends of separate labels. The length of the unprinted part of this label is equal to the circumference of the cable or wire. In addition, the text can be printed horizontally or rotated 90°.



After selecting the **FLAG** Label Type mode, specify the length and diameter of the flag, a frame style if desired, and whether or not to rotate the text.

- **FLAG ϕ** (flag diameter): 0 to 100 mm
Default: 7 mm
- **FLAG LEN** (flag length): 10 to 200 mm
Default: 30 mm
- **FRAME:** OFF, ☐ 1, ☐ 2, ☐ 3, ☐ 4
Default: OFF
- **ROTATE:** OFF, ON
Default: OFF

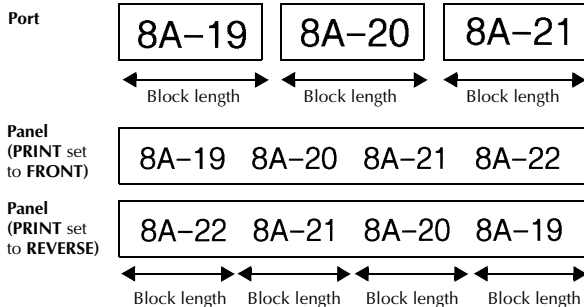
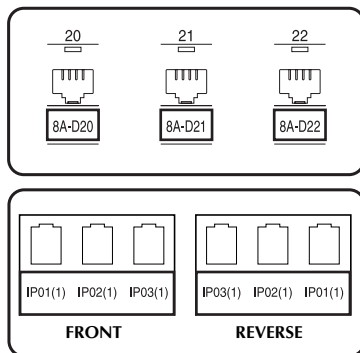
- ☞ A single block of text can contain a maximum of 7 text lines.
- ☞ For labels to be attached to cables and wires, we recommend using Flexible ID Tape. To wrap Flexible ID Tape around cylindrical objects, use the **FLAG** Label Type mode when the diameter of the object is less than 3 mm. In addition, the flag length should be at least 5 mm.

Port & Panel Modes

Labels printed using these Label Type modes can be used to identify various components or panels.

With the **Port** Label Type mode, each block of the text is printed on a separate label, making these labels useful for identifying different components or ports that are not equally spaced.

With the **Panel** Label Type mode, all blocks of the text are evenly spaced on a single label, making this label useful for a row of equally spaced switches, fuses or connectors on a patch panel. In addition, the text blocks can be printed in the order that they were typed in or in the opposite order.



After selecting the **PORT** or **PANEL** Label Type mode, specify the length of each text block or label, and select a frame style if desired. For the **PANEL** Label Type mode, select whether the text blocks are printed in the order that they were typed in or in the reverse order.

- **BLK LEN.** (block length):
 - * For the **PORT** Label Type mode:
20 to 200 mm
Default: 30 mm
 - * For the **PANEL** Label Type mode:
6 to 200 mm
Default: 30 mm
- **FRAME:**
 - * For the **PORT** Label Type mode:
OFF, 1 , 2 , 3 , 4
Default: **OFF**
 - * For the **PANEL** Label Type mode:
OFF, 1 , 2 , 3 ,
4 , 5 , 6 ,
7 , 8 , 9
Default: **OFF**
- **PRINT** (print order):
FRONT, REVERSE
Default: **FRONT**

- ✎ For these types of labels, we recommend using Strong Adhesive Tape.
- ✎ The **PRINT** parameter is only available with the **PANEL** Label Type mode.
- ✎ By using the Numbering function with the **PANEL** Label Type mode, a single label containing multiple blocks of ascending characters can easily be created, for example, to label patch panels as shown above. (For details on the Numbering function, refer to *Printing multiple copies with incremental characters* on page 32.)

3 *Basic Functions*

Performing Basic Operations

Choosing functions, parameters, settings and groups

- If “◀▶” appears, press  to select the previous item or  to select the next item.
- If “◀▶” appears, press  to select the previous item or  to select the next item.

Choosing the default setting

- To select the default setting of a function or parameter, press .

Confirming a choice

- To select an item from a list, to apply a selected setting, or to answer “yes”, press .

Cancelling a choice

- To quit a function and return to the previous display without changing the text, or to answer “no”, press .

Inputting Label Data

Entering and editing text

Entering characters

- To type a lowercase letter, a number, a comma or a period, simply press the key for that character.
- To type an uppercase letter, press  to enter Shift mode, and then press the applicable letter.
- To type uppercase letters continuously, press , then  to enter Caps mode, and then type.

 To exit Shift mode without typing a letter, press .

 To exit Caps mode, press , then .

 To type a lowercase letter in Caps mode, press , then the applicable letter.

Entering spaces

- To add a blank space to the text, press .

Moving the cursor

Move the cursor in order to review and edit the text, or you can select the various functions and settings.

- To move the cursor left, right, up or down, press , ,  or .
- To move the cursor to the beginning of the current line of text, press , then .
- To move the cursor to the end of the current line of text, press , then .
- To move the cursor to the beginning of the entered text, press , then .
- To move the cursor to the end of the entered text, press , then .

 To move the cursor several characters or lines at once, hold down , ,  or .

Adding a new line of text

- To end the current line of text and start a new one, press . “↵” appears at the end of the line.

 The number of text lines that can be printed depends on the width of the tape.

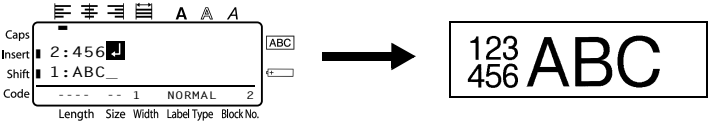
Tape Width	Maximum Number of Lines That Can Be Printed
6 mm	2
9 mm	2
12 mm	3
18 mm	5
24 mm	7

 The line number on the display indicates the line number of the text block.

Adding a new text block

- To create a new text block so that one section of the text can have a different number of lines than another, press , then . “↵” appears at the end of the block.

For example, text entered as shown below, will be printed as follows.



-  A single label can only contain a maximum of fifty text blocks.
-  The number of the block that the cursor is in is indicated at the bottom of the display.
-  All texts blocks have the same formatting features.
-  While trying to print a large amount of data at one time, some outputted labels may be blank. For example, when printing 50 records, the maximum number of characters that can be printed at one time is limited to approximately 200.

Inserting text

- To insert the text that you type at the cursor's current position, make sure that the **Insert** indicator is displayed. Otherwise, press  to enter **Insert** mode.
- To replace the text at the cursor's current position instead of inserting it, press  to exit **Insert** mode.

Deleting text

- To remove characters to the left of the cursor's current position, press  until all of the characters that you wish to delete are removed.
- To delete all of the text:
 - 1 Press , then .
 - 2 Press  or  to select either **TEXT ONLY** (to erase just the text) or **TEXT&FORMAT** (to erase all of the text and return all formatting functions to their default settings).
 - 3 Press .

Entering an accented character

There are various accented characters available with the Accent function.

The following accented characters are available.

Letter	Accented Characters						Letter	Accented Characters					
	0	1	2	3	4	5		0	1	2	3	4	5
A	À	Á	Ä	Â	Ã	Æ	a	à	á	ä	â	ã	æ
C	Ç						c	ç					
E	È	É	Ë	Ê	Ë		e	è	é	ë	ê	ë	
I	Í	Ï	Î				i	í	ï	î			
N	Ñ						n	ñ					
O	Ó	Ö	Ô	Õ			o	ó	ö	ô	õ		
U	Ù	Ú	Û	Û			u	ù	ú	ü	û		

- 1 Press , then . The message "ACCENT a-u/A-U?" appears.
- 2 Press the key of the letter in the desired accented character until the desired character is selected.
- 3 Add the accented character(s) to the text.
 - To add a single accented character or the last one in a series, skip to step 5.
 - To add a series of accented characters to the text, press , then .
- 4 For each additional accented character, repeat steps 2 and 3.
- 5 Press .

- To type in an uppercase accented character, press  (or press , then  to enter Caps mode) before pressing the letter key.
- An accented character can also be selected by typing in the corresponding code from the table above. For example, typing “A2”, then pressing  adds “Ä” to the text.

Entering a bar code

The **Bar Code** function allows bar codes to be printed as part of labels.

- Since this machine is not specifically designed for special bar code label-making, some bar code readers may not be able to read the labels.
- Bar code readers may not be able to read bar codes printed with certain ink colours on certain label tape colours. For best results, print barcode labels in black on white tape.

In addition, the various bar code parameters enable you to create more customized bar codes.

Parameter	Settings
PROTOCOL	CODE 39, I-2/5, EAN13, EAN8, UPC-A, UPC-E, CODABAR, EAN128, CODE128
WIDTH (bar width)	MEDIUM, SMALL, LARGE
UNDER# (numbers printed below bar code)	ON, OFF
CHECK DIGIT	OFF, ON

- The **CHECK DIGIT** parameter is only available with the **CODE 39, I-2/5** and **CODABAR** protocols.

Setting bar code parameters

- Press , then .
- Press  or  until the parameter that you wish to change is displayed.
- Press  or  until the desired setting is displayed.
- Repeat steps **2** and **3** until all parameters are set as you wish.
- Press .

Entering bar code data

- 1 Press .
- 2 Type in the new bar code data or edit the old data.
- 3 Press  to add the bar code to the text.

-  To add special characters to the bar code data (only with protocols **CODE39**, **CODABAR**, **EAN128** or **CODE128**), position the cursor below the character immediately to the right of where you wish to add the special character, and then press . Press  or  until the desired special character is displayed, and then press  to add the character to the data. (Refer to the tables below for a list of the special characters that are available.)
-  To change the data or **WIDTH** or **UNDER#** parameter settings of a bar code that has already been added to the text, position the cursor below the bar code mark (), and then press , then .

The following special characters can only be added to bar codes created using protocol **CODE39** or **CODABAR**.

CODE39

Symbol	Character	Symbol	Character
0	—	4	/
1	.	5	+
2	(SPACE)	6	%
3	\$		

CODABAR

Symbol	Character	Symbol	Character
0	—	3	/
1	\$	4	.
2	:	5	+

The following special characters can only be added to bar codes created using protocols **EAN128** and **CODE128**.

Symbol	Character	Symbol	Character	Symbol	Character	Symbol	Character
0	(SPACE)	18	<	36	BEL	54	EM
1	!	19	=	37	BS	55	SUB
2	”	20	>	38	HT	56	ESC
3	#	21	?	39	LF	57	{
4	\$	22	@	40	VT	58	FS
5	%	23	[	41	FF	59	
6	&	24	\	42	CR	60	GS
7	'	25	]	43	SO	61	}
8	(	26	^	44	SI	62	RS
9	)	27	_	45	DLE	63	~
10	*	28	NUL	46	DC1	64	US
11	+	29	`	47	DC2	65	DEL
12	,	30	SOH	48	DC3	66	FNC3
13	—	31	STX	49	DC4	67	FNC2
14	.	32	ETX	50	NAK	68	FNC4
15	/	33	EOT	51	SYN	69	FNC1
16	:	34	ENQ	52	ETB		
17	;	35	ACK	53	CAN		

Entering a symbol

There are 147 symbols and pictures available with the Symbol function.

- Press . The last category used is displayed.
- Press  or  to select the desired category.
- Press  or  until the desired symbol is selected.
- Add the symbol(s) to the text.
 - To add a single symbol or the last one in a series, skip to step 6.
 - To add a series of symbols to the text, press , then .
- For each additional symbol, repeat steps 2 through 4.

-  A symbol can also be selected by typing in the corresponding code from the table below. For example, typing “A02”, then pressing  adds “?” to the text.
-  Some symbols are printed in colour on the keypad. To use a symbol on a key, press  to enter Code mode, and then press the key for the symbol.

The following symbols are available.

Category		Symbols									
A	PUNCTUATION	.	,	?	!	”	'	:	;	—	—
		00	01	02	03	04	05	06	07	08	09
		\	/	&	¿	¡	~	§	▪		
		10	11	12	13	14	15	16	17		
B	BUSINESS	@	#	%	®	©	™				
		00	01	02	03	04	05				
C	MATHEMATICS	+	−	×	*	±	=	÷			
		00	01	02	03	04	05	06			
D	BRACKET	(	)	[	]	<	>	《	》		
		00	01	02	03	04	05	06	07		
E	ARROW	→	←	↑	↓	➡	➡	⬆	⬇	👉	👈
		00	01	02	03	04	05	06	07	08	09
F	UNIT	°	\$	¥	£	€	¢	Fr	f	φ	
		00	01	02	03	04	05	06	07	08	
G	INTERNATIONAL CHARACTERS	ä	ü	ß	ss	ä	ß	γ	δ	μ	Ω
		00	01	02	03	04	05	06	07	08	09
		Ð	ð	Þ	þ	ij					
		10	11	12	13	14					

Category		Symbols										
H	NUMBER	1/2	1/3	1/4	0	1	2	1	2			
		00	01	02	03	04	05	06	07			
I	PICTOGRAPH	★	○	●	□	△	◆					
		00	01	02	03	04	05					
J	ELECTRICAL / ELECTRONIC											
		00	01	02	03	04	05	06	07	08	09	
		10	11	12	13	14	15	16	17	18	19	
		20	21	22	23	24	25	26	27	28	29	
		30	31	32	33	34	35	36	37	38	39	
		40	41	42								
K	PROHIBITION											
		00	01	02								
L	WARNING											
		00	01	02	03	04	05	06				
M	COMMUNICATIONS											
		00	01	02								
N	OTHERS											
		00	01	02	03							
Z	PERSONAL CATEGORY	*A maximum of 16 most recently selected symbols are automatically saved in the PERSONAL symbol category.										

Once the **PERSONAL** symbol category becomes full, newly selected symbols will overwrite older ones unless the Symbol Save function is set to **OFF**. (Refer to *Specifying if the PERSONAL symbol category is continually updated* on page 40.)

Formatting the Label

Specifying a label length

The length of the label can be specified as follows.

- 1 Press **Code**, then **Length** **A**.
- 2 Press **←** or **→** until **LENGTH** is displayed.
- 3 Press **Home** **↑** or **End** **↓** until the desired label length is displayed (or use the number keys to type in the desired setting).
- 4 Press **New Block** **↵**.



Specifying a margin size

The size of the margins for the left and right sides of the text can be specified.

- 1 Press **Code**, then **Length** **A**.
- 2 Press **←** or **→** until **MARGIN** is displayed.
- 3 Press **Home** **↑** or **End** **↓** until the desired margin setting is displayed (or use the number keys to type in the desired setting).
- 4 Press **New Block** **↵**.



Framing the text

- 1 Press **Code**, then **Frame B**.
- 2 Press **Home** or **End** until the desired frame setting is displayed.
- 3 Press **New Block**. The selected setting is applied to the entire text.

The following frame styles are available.

Frame Setting	Sample	Frame Setting	Sample
1	ABC DEFG HIJK LM NOP QR	8	ABC DEFG HIJK LM NOP QR
2	ABC DEFG HIJK LM NOP QR	9	ABC DEFG HIJK LM NOP QR
3	ABC DEFG HIJK LM NOP QR	10	ABC DEFG HIJK LM NOP QR
4	ABC DEFG HIJK LM NOP QR	11	ABC DEFG HIJK LM NOP QR
5	ABC DEFG HIJK LM NOP QR	12	ABC DEFG HIJK LM NOP QR
6	ABC DEFG HIJK LM NOP QR	13	ABC DEFG HIJK LM NOP QR
7	ABC DEFG HIJK LM NOP QR	14	ABC DEFG HIJK LM NOP QR

Specifying the character size

The character size can be specified for all text in the label or only for the text in the line that the cursor is in.

- ☞ With the default character size setting **AUTO**, the largest possible text size is automatically selected depending on the width of the installed tape and the number of lines in the text.

Formatting the character size of all text

- 1 Press .
- 2 Press  or  until **GLB SIZE** is displayed.
- 3 Press  or  until the desired character size setting is displayed.
- 4 Press . The selected setting is applied to the entire text.

Formatting the character size of a line

- 1 Move the cursor to the line of text whose size you wish to change.
- 2 Press , then .
- 3 Press  or  until the desired character size setting is displayed.
- 4 Press . The selected setting is only applied to the text line that the cursor is positioned in.

- ☞ Since the text sizes that can be printed depends on the width of the tape, the following table shows the maximum text size that can be used with each tape width.

Tape Width	Maximum Text Size
6 mm	12 points (3 mm)
9 mm	18 points (4 mm)
12 mm	24 points (6 mm)
18 mm	36 points (9 mm)
24 mm	48 points (12 mm)

- ☞ With the **AUTO** setting selected and the text in a block consisting of just one line of only uppercase letters (and no accented letters), the text is printed slightly larger than the maximum possible for the tape width.

Specifying the character width

Formatting the width of all text

- 1 Press **Format**.
- 2 Press **Left Arrow** or **Right Arrow** until **GLB WIDE** is displayed.
- 3 Press **Home** or **End** until the desired character width setting is displayed.
- 4 Press **New Block**. The selected setting is applied to the entire text.

Formatting the width of a line

- 1 Move the cursor to the line of text whose character width you wish to change.
- 2 Press **Code**, then **Size E**.
- 3 Press **Left Arrow** or **Right Arrow** until **WIDTH** is displayed.
- 4 Press **Home** or **End** until the desired character width setting is displayed.
- 5 Press **New Block**. The selected setting is only applied to the text line that the cursor is positioned in.

The following width sizes are available for each text size as shown.

Width Size	NORMAL	NARROW	MINIMUM	WIDE
12 mm (48 points)	ABC	ABC	ABC	ABC
9 mm (36 points)	ABC	ABC	ABC	ABC
6 mm (24 points)	ABC	ABC	ABC	ABC
4 mm (18 points)	ABC	ABC	ABC	ABC
3 mm (12 points)	ABC	ABC	ABC	ABC
2 mm (9 points)	ABC	ABC	ABC	ABC
1 mm (6 points)	ABC	ABC	ABC	ABC

Specifying the character style

Formatting the character style of all text

- 1 Press **Format**.
- 2 Press **←** or **→** until **GLB STYL** is displayed.
- 3 Press **↑** or **↓** until the desired character style setting is displayed.
- 4 Press **↵**. The selected setting is applied to the entire text.

Formatting the character style of a line

- 1 Move the cursor to the line of text whose character style you wish to change.
- 2 Press **Code**, then **D**.
- 3 Press **↑** or **↓** until the desired character style setting is displayed.
- 4 Press **↵**. The selected setting is only applied to the text line that the cursor is positioned in.

The following text styles are available.

Style Setting	Sample	Style Setting	Sample
NORMAL	ABC	ITALIC	<i>ABC</i>
BOLD	ABC	I+BOLD (italic & bold)	<i>ABC</i>
OUTLINE	ABC	I+OUTL (italic & outline)	<i>ABC</i>

Specifying the alignment for all lines in the text

- 1 Press .
- 2 Press  or  until **ALIGN** is displayed.
- 3 Press  or  until the desired setting is displayed.
- 4 Press . The selected setting is applied to the entire text.

The following alignment settings are available.

ABC DEFGH IJKLM	ABC DEFGH IJKLM	ABC DEFGH IJKLM	A B C DEFGH I J K L M
LEFT	CENTER	RIGHT	JUSTIFY

Using the pre-formatted Auto Format templates

Various pre-formatted label templates are available, enabling you to quickly and easily create labels for a variety of applications—from identifying the contents of boxes and file folders to labelling equipment and making name badges and ID tags. After simply selecting one of the ten label templates, type text into each of its fields, and then the label is ready to be printed.

The following label templates are available.

Key	Template Name	Tape Width × Label Length	Template Fields	Sample						
①	BIN BOX	18 mm × 70 mm	① SYMBOL? ② TEXT1? ③ TEXT2? ④ BAR CODE?							
②	ASSET1	24 mm × 84 mm	① TEXT1? ② TEXT2? ③ BAR CODE?	PROPERTY OF SALES & MARKETING DIV.  *0312*						
③	ASSET2	24 mm × 80 mm	① TEXT? ② BAR CODE?	Fixed Asset  4 400000 100009						
④	ASSET3	24 mm × 41 mm	① TEXT? ② BAR CODE?	*** City Public Library  01234567						
⑤	ASSET4	24 mm × 56 mm	① TEXT1? ② TEXT2? ③ TEXT3? ④ TEXT4? ⑤ TEXT5?	<table border="1"><tr><td colspan="2">Brother Industries, Ltd.</td></tr><tr><td>Control</td><td>Sales</td></tr><tr><td colspan="2">Equipment # 123456789</td></tr></table>	Brother Industries, Ltd.		Control	Sales	Equipment # 123456789	
Brother Industries, Ltd.										
Control	Sales									
Equipment # 123456789										
⑥	ID LABEL	24 mm × 70 mm	① TEXT1? ② TEXT2? ③ TEXT3?	<table border="1"><tr><td>DAILY FAXES(5)</td></tr><tr><td>9/99 Present</td></tr><tr><td>J.Smith</td></tr></table>	DAILY FAXES(5)	9/99 Present	J.Smith			
DAILY FAXES(5)										
9/99 Present										
J.Smith										
⑦	SIGN	24 mm × 102 mm	① SYMBOL? ② TEXT1? ③ TEXT2?	 NO SMOKING						
⑧	BADGE	18 mm × 102 mm	① NAME? ② COMPANY?	Robert Becker ABC Transport						
⑨	FILING	12 mm × 89 mm	① TITLE? ② SUBTITLE?	August Sales Report Overseas Sales Div.						
⑩	IC CHIP	9 mm × 26 mm	① TEXT1? ② TEXT2?	01234567 ver.1.01						

1 Press , then the number key where the template that you wish to use is assigned.

2 Press . The first field for the selected template is displayed.

- 3 Press  or  to display each field, and then type in the text.
- 4 • To print a single copy, press .
- To print multiple copies, several copies while increasing certain characters, or a mirror image of the text, press , then  . (For details, refer to *Using special printing functions* on page 32.)

 Accented characters (page 18), symbols (page 21) and bar codes (page 19) can be entered in the template fields.

 To quit using the template, display the last field, and then press . The Auto Format menu appears. Press  or  until **EXIT** appears, and then press .

Printing Labels

Previewing the label layout

The **Preview** function allows you to see a sample of the layout of the text.

- To use the print preview, press , then . The length of the current label is indicated in the lower-left corner of the display.

 To scroll the print preview left or right, press  or .

 To return to the text, press  or .

Feeding tape

- To feed out 23 mm of tape, press . The message “FEED” is displayed.

 Press  to feed out any leftover printed tape after pressing  to quit printing.

Printing a label

- To print out a label, press . The message “WORKING”, then “COPIES” followed by the number of the label being printed is displayed.

 To quit printing, press  to turn off the P-touch.

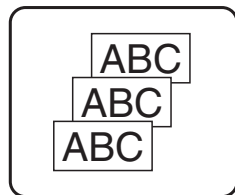
Using special printing functions

Various special printing functions are available that enable you to print multiple copies of labels, print several copies while incrementing the values of certain characters, print specific sections of label text, or print label text as a mirror image.

Printing multiple copies of a label

The Repeat Printing function allows you to print up to 99 copies of the same text.

- 1 Press **Code**, then **Print Option** (Label Type).
- 2 Press **Left Arrow** or **Right Arrow** until **COPIES** is displayed.
- 3 Press **Home** or **End** until the desired number of copies is displayed (or use the number keys to type in the desired setting).
- 4 Press **New Block** (or **Print**). **START** appears in the Print Option menu.
- 5 Press **New Block** (or **Print**) to begin printing the specified number of copies. The number of each copy is displayed while it is being printed.

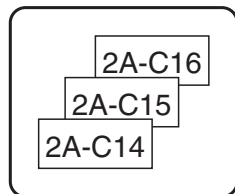


- ⓘ If the Cut function is set to **1** or **3**, the message “CUT TAPE TO CONTINUE” appears after each label is printed. Press the tape cutter button to cut off the label and continue printing.
- ⓘ Be sure to cut the tape within 5 minutes from the time that the message appears.
- ⓘ For the different options available for cutting the tape, refer to *Selecting how tape is fed and cut* on page 38.
- ⓘ To specify settings for additional Print Option functions, instead of continuing with step **5**, press **Home** or **End** until **CONTINUE** is displayed in the Print Option menu, and then press **New Block**.

Printing multiple copies with incremental characters

The Numbering function can be used to print several copies of the same text while incrementing the values of certain characters (letters, numbers or bar code data) after each label is printed. This type of automatic incrementation is very useful when printing serial number labels, production control labels or other labels requiring ascending codes.

- 1 Press **Code**, then **Print Option** (Label Type).



- 2 Press  or  until **NUMBER** is displayed.
- 3 Press  or  until the desired number of copies is displayed (or use the number keys to type in the desired setting).
- 4 Press . The message “START?” appears. (To specify only the character at the cursor’s current position as the numbering field, press , and then skip to step 9.)
- 5 Press , ,  or  until the first character that you wish to include in the numbering field is flashing.
- 6 Press . The message “END?” appears.
- 7 Press , ,  or  until the last character that you wish to include in the numbering field is flashing.
- 8 Press . **START** appears in the Print Option menu.
- 9 Press  (or ) to begin printing the specified number of labels. The number of each copy is displayed while it is being printed.

- ☞ If the Cut function is set to **1** or **3**, the message “CUT TAPE TO CONTINUE” appears after each label is printed. Press the tape cutter button to cut off the label and continue printing.
- ☞ Be sure to cut the tape within 5 minutes from the time that the message appears.
- ☞ For the different options available for cutting the tape, refer to *Selecting how tape is fed and cut* on page 38.
- ☞ Letters and numbers increase as shown below.

0 → 1 → ...9 → 0 → ...
 A → B → ...Z → A → ...
 a → b → ...z → a → ...
 A0 → A1 → ...A9 → B0 → ...

Spaces (shown as underlines “_” in the examples below) can be used to adjust the space between characters or to control the number of digits that are printed.

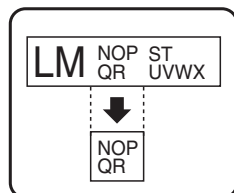
_Z → AA → ...ZZ → AA → ...
 _9 → 10 → ...99 → 00 → ...
 1_9 → 2_0 → ...9_9 → 0_0 → ...
- ☞ Only one numbering field can be selected from any text.
- ☞ A numbering field must be located entirely within one line of text of a single block.
- ☞ A maximum of five characters can be selected for the numbering field.
- ☞ If you include a non-alphanumeric character such as a symbol in the numbering field, only the letters and numbers in the numbering field will be increased when the labels are printed, or just one label will be printed if the field only contains a non-alphanumeric character.

- To specify settings for additional Print Option functions, instead of continuing with step 9, press  or  until **CONTINUE** is displayed in the Print Option menu, and then press .
- If a bar code is selected as the numbering field in step 5, skip steps 6 and 7, and continue with step 8.

Printing a range of text blocks

The Block Printing function enables you to select the range of text blocks to print.

- Press , then .
- Press  or  until the first number in the range displayed below **BLOCK NO.** is flashing.
- Press  or  until the desired block number is displayed (or use the number keys to type in the desired setting).
- Press  so that the second number in the range displayed below **BLOCK NO.** is flashing.
- Press  or  until the desired block number is displayed (or use the number keys to type in the desired setting).
- Press  (or ). **START** appears in the Print Option menu.
- Press  (or ) to begin printing the specified number of labels. The number of each copy is displayed while it is being printed.

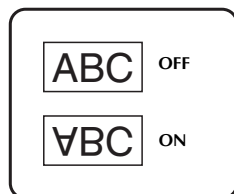


- To specify settings for additional Print Option functions, instead of continuing with step 7, press  or  until **CONTINUE** is displayed in the Print Option menu, and then press .

Printing mirrored labels

This function prints your label so that the text can be read from the adhesive side of the tape. If mirror-printed labels are attached to glass or some other transparent material, they can be read correctly from the opposite side.

- Press , then .
- Press  or  until **MIRROR** is displayed.

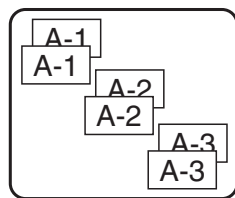


- ③ Press  or  until **ON** is displayed.
- ④ Press  (or ). **START** appears in the Print Option menu.
- ⑤ Press  (or ) to begin printing the specified number of labels. The number of each copy is displayed while it is being printed.

- ☞ When using the Mirror Printing function, the text should be printed on clear tape.
- ☞ To specify settings for additional Print Option functions, instead of continuing with step ⑤, press  or  until **CONTINUE** is displayed in the Print Option menu, and then press .

Combining special printing functions

Many of the special printing functions can be combined, depending on various conditions, such as which Label Type mode is selected or whether a template is being used. For example, by combining the operations for the Repeat Printing function and the Numbering function to print two copies of a label with “1” selected as the numbering field and three increments, the labels shown above will be printed.



- ☞ For details on the various special printing functions, refer to the corresponding section above.

Storing and Recalling Files

Frequently used label text along with its formatting can be stored in the memory and easily recalled so that it can be edited and quickly printed. When each text file is stored, it is given a number to make recalling it easier. Up to 10 text files or approximately 2,000 characters can be stored in the memory.

Since a copy of the stored text file is recalled when the Recall function is used, the text can be edited or printed without changing the originally stored file. When a file is no longer needed or more space is necessary, the Clear function can be used to delete text files.

Storing label text

- 1 Press .
- 2 Press  or  until **STORE** is displayed.
- 3 Press .
- 4 Press  or  until the file number where you wish to store the text is displayed.
- 5 Press .

- ☞ If the maximum number of characters has already been stored, the error message “MEMORY FULL!” appears in the display. If this occurs, an existing text file must be deleted before the new one can be stored.
- ☞ If a file is already stored under the selected file number, the message “OVERWRITE?” appears in the display. To overwrite the stored file with the new one, press . To go back and choose another file number without overwriting the text file, press  (BS), and then select a different file number.

Recalling text that has been stored

- 1 Press .
- 2 Press  or  until **RECALL** is displayed.
- 3 Press .
- 4 Press  or  until the file number containing the text that you wish to recall is displayed.
- 5 Press . Any text previously entered in the display is erased and the text stored under the selected file number is recalled into the display.

 To view other parts of the selected text file, press  or .

Deleting text that has been stored

- 1 Press .
- 2 Press  or  until **CLEAR** is displayed.
- 3 Press .
- 4 Press  or  until the file number containing the text that you wish to delete is displayed.
- 5 Select the file(s) to be deleted.
 - To delete a single file, skip to step 6.
 - To select multiple files, press . The current file number is highlighted. Continue selecting text files by repeating step 4, then pressing  until all files that you wish to delete are selected.
 - To delete all files, press , then .
- 6 Press . The message “OK TO CLEAR?” (or “CLEAR ALL?” if all files were selected) appears.
- 7 Press . The text stored in the selected files is deleted.

 If you do not wish to delete the selected text file(s), press  instead of  in step 7.

 To view other parts of the selected text file, press  or .

 To remove a text file from those that are to be deleted, display the text file, and then press  so that the file number is no longer highlighted.

4 Machine Adjustments

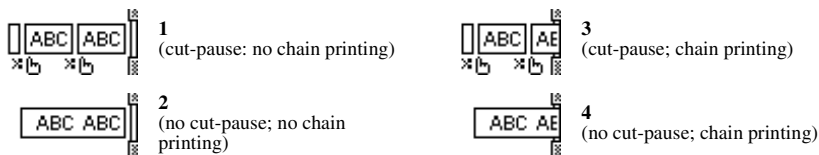
Various functions are available for changing and adjusting the operation of the P-touch.

Selecting how tape is fed and cut

The **Cut** function enables you to specify how the tape is fed out after it is printed. The settings of the Cut function consist of combinations of two different cut methods: **cut-pause** (where the machine stops printing so the label can be cut) and chain printing (where the last copy is not fed out to be cut, reducing the amount of tape that is wasted).

Chain printing is an economical function designed to help eliminate “wasted tape” at the beginning of labels. Without chain printing, the excess from the previous printing session is cut before the first label in the current session is printed. However, if a setting using chain printing is selected, the last label in the previous session remains in the machine (is not fed out), so that the next label can be printed without wasting tape. When the last label is printed, press **Feed** to feed the chain of labels, and then press the tape cutter button to cut it.

The following settings are available: (The default setting is 1.)



- 1 Press **Code**, then **Setup**.
- 2 Press **Left Arrow** or **Right Arrow** until **CUT** is displayed.
- 3 Press **Home** or **End** until the desired setting is displayed, and then press **New Block**.

After printing with the **Cut** function set to 3 or 4, press **Feed** to feed the tape, and then press the tape cutter button to cut it.

Adjusting the display contrast

The display can be made lighter or darker by selecting a setting between -2 and +2. (The default setting is 0.) Select a higher value to increase the contrast (make the display darker). Select a lower value to decrease the contrast (make the display lighter).

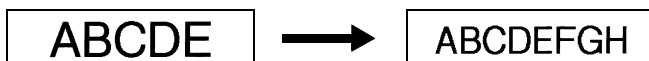
- 1 Press **Code**, then **Setup** **Z**.
- 2 Press **Left Arrow** or **Right Arrow** until **CONTRAST** is displayed.
- 3 Press **Home** **Up Arrow** or **End** **Down Arrow** until the desired setting is displayed, and then press **New Block** **Left Arrow**.

Setting the Auto Reduction function

With the Auto Reduction function, you can select whether the text width (**TEXT WIDTH**) or the text size (**TEXT SIZE**) will be reduced if text that is set to the **AUTO** Size setting is too large for the specified label length. (The default setting is **TEXT SIZE**.)

- 1 Press **Code**, then **Setup** **Z**.
- 2 Press **Left Arrow** or **Right Arrow** until **AUTO REDUCTION** is displayed.
- 3 Press **Home** **Up Arrow** or **End** **Down Arrow** until the desired setting is displayed, and then press **New Block** **Left Arrow**.

If **TEXT SIZE** is selected and more text is added, the character size is reduced so the text fits within the specified label length.



If **TEXT WIDTH** is selected and more text is added, the character width is reduced so the text fits within the specified label length.

However, after the character width is reduced to **MINIMUM**, the character size will be reduced so the text fits within the specified label length.



Calibrating the label length

If the length of the printed label does not correspond to the length specified with the Length function, the printed label length can be recalibrated with the Length Adjust function by selecting a setting between **-1** and **+3**. (The default setting is **0**.)

- 1 Press **Code**, then **Setup** **Z**.
- 2 Press **Left Arrow** or **Right Arrow** until **LENGTH ADJUST** is displayed.
- 3 Press **Home** **Up Arrow** or **End** **Down Arrow** until the desired setting is displayed, and then press **New Block** **Left Arrow**.

Specifying if the PERSONAL symbol category is continually updated

You can specify whether symbols continue to be added to the **PERSONAL** symbol category (with the older symbols deleted) when the category becomes full (**ON**) or symbols are no longer added after the **PERSONAL** symbol category becomes full (**OFF**). (The default setting is **ON**.)

- 1 Press , then .
- 2 Press  or  until **SYMBOL SAVE** is displayed.
- 3 Press  or  until the desired setting is displayed, and then press .

Changing the units of measure

The units used for displaying measurements can be set to millimeters (**mm**) or inches (**inch**). (The default setting is **inch**.)

- 1 Press , then .
- 2 Press  or  until **UNITS** is displayed.
- 3 Press  or  until the desired setting is displayed, and then press .

Changing the language

The language of the menus, settings and messages can be changed by selecting **ENGLISH** or **FRANÇAIS**. (The default setting is **ENGLISH**.)

- 1 Press , then .
- 2 Press  or  until **LANGUAGE** is displayed.
- 3 Press  or  until the desired setting is displayed, and then press .

Displaying version information

This function can be used to display the version information for the P-touch software and built-in symbol set.

- 1 Press , then .
- 2 Press  or  until **VERSION INFO** is displayed.
- 3 Press  or  until the desired version information is displayed.
- 4 Press  to exit Setup mode.

5 *Using P-touch With a Computer* (for PT-1650 only)

This P-touch is equipped with a USB port, allowing you to connect it to a computer running Microsoft® Windows®. The enclosed CD-ROM contains P-touch Editor 3.2, which is installed together with the printer driver, Transfer Manager and Backup Manager.

- **P-touch Editor 3.2** is a label-designing software that provides additional illustration and layout features enabling you to design more elaborate label templates and create databases. Once these label templates and databases have been created, they can be downloaded to the P-touch, where they can be used to print labels.
- **Transfer Manager** is used to download data created on the computer to this portable P-touch, so that it can be used anywhere you go to create labels. The following types of data can be downloaded to the P-touch.
 - Label templates created with P-touch Editor allow you to expand the P-touch's capabilities to create customized labels.
 - Databases created with P-touch Editor or in the *.csv format provide you with convenient access to large amounts of data (for example, customer lists and inventory), which can be used to print labels.
 - User-defined character images in the *.bmp format can be used to enhance labels with characters that are not available on the P-touch.
- **Backup Manager** allows you to back up the following types of data from the P-touch onto the computer, and restore this data to the P-touch in case the P-touch data is lost.
 - Label templates
 - Database
 - User-defined character images
 - Label files stored in the P-touch memory

- ⚠ **The P-touch Editor software and the printer driver must be installed before the P-touch is connected to the computer or turned on.**
- ⚠ Only use the enclosed USB interface cable to connect the P-touch to the computer.
- ⚠ A single computer cannot be connected to multiple P-touch machines at the same time.
- ⚠ **Although the P-touch can be connected to the computer through a USB connection, label layouts created in P-touch Editor cannot be printed directly from the application.**

Installing the Software & Printer Driver

The P-touch Editor 3.2 software, provided on the enclosed CD-ROM, includes a variety of more complex functions for printing bar codes and images, enabling you to design just about any label that you can imagine. With this application, the printer driver must also be installed in order for the application to communicate with the P-touch.

 **Although the P-touch can be connected to the computer through a USB connection, label layouts created in P-touch Editor cannot be printed directly from the application.**

Before installation

Check that your system configuration meets the following requirements.

Computer	IBM [®] PC/AT or compatible
Operating system	Microsoft [®] Windows [®] 98, 98 SE, Me, 2000 Professional, XP Professional or XP Home Edition
Processor	Pentium 166 MHz or higher (XP Professional and XP Home Edition: Pentium 300 MHz or higher)
Memory	At least 64 MB (XP Professional and XP Home Edition: 128 MB or higher)
Hard disk free space	At least 20 MB (100 MB for a full installation)
Monitor	800 x 600 dpi (SVGA)/High Colour or higher
USB port	Available
CD-ROM drive	Available

-  For installation on Windows[®] 2000, administrator privileges are required. In addition, transferring data requires power user or administrator privileges. This software cannot be operated in Users groups. In addition, this software is not compatible with the Windows[®] 2000 Server operating system.
-  With Windows[®] XP, transferring data and installation is only possible from an account with administrator privileges.

Installing the P-touch Editor 3.2 software

-  **Do not connect the P-touch to the computer until you are instructed to.**
-  **We strongly recommend closing all Windows applications before installing this software.**

- 1** Insert the enclosed CD-ROM into the computer's CD-ROM drive. The InstallShield® Wizard for installing the P-touch Editor software starts up, and then the "Welcome" dialog box appears.

-  If the InstallShield® Wizard does not automatically start up:
First, double-click "My Computer" on the desktop, and then double-click the CD-ROM drive containing the CD-ROM. (For Windows® XP, click "My Computer" in the Start menu, and then double-click the CD-ROM drive containing the CD-ROM.)
Then, double-click "Setup.exe" to display the dialog box.

- 2** Carefully read the contents of the "Welcome" dialog box, and then click "Next" to continue. The "User Information" dialog box appears.
- 3** Type the necessary information into the appropriate boxes, and then click "Next". A dialog box appears, asking for confirmation of the entered information.
- 4** Click "Yes" to register the entered information. The "Setup Type" dialog box appears.
- 5** Select the installation method, and then click "Next".
If "Custom" is selected, clicking "Next" will display a dialog box that allows you to select which options to install.
After P-touch Editor is installed, a dialog box appears, allowing you to select whether or not to install the printer driver.
- 6** Click "Yes". The first Driver Setup dialog box appears, informing you that the P-touch printer driver will be installed.
- 7** Continue with the procedure in *Installing the USB printer driver* on page 44.
- 8** When installation of P-touch Editor is finished, a dialog box appears, allowing you to upgrade P-touch Editor 3.2 so that it will be compatible with Access 2000. To upgrade P-touch Editor 3.2 for Access 2000, click "Yes", and then follow the instructions that appear.

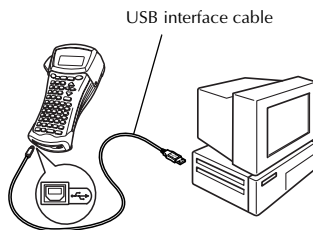
-  If a dialog box appears, indicating that the installation is finished and suggesting that the computer be restarted, select the option for restarting the computer, click "Finish" to restart the computer, and then remove the CD-ROM from the CD-ROM drive.
-  To uninstall the P-touch Editor 3.2 software, double-click "Add/Remove Programs" ("Add or Remove Programs" in Windows® XP) in the Control Panel window, and then follow the instructions that appear.

Installing the USB printer driver

 **Do not connect the P-touch to the computer until you are instructed to do so, otherwise the printer driver may not be installed correctly.**

With Windows® 98, 98 SE, Me or 2000:

- 1 When the dialog box appears, informing you that the P-touch printer driver will be installed, click “Next”. A dialog box appears, instructing you to connect the P-touch to the computer.
- 2 Connect the P-touch to the computer using the enclosed USB interface cable, and then **hold down**  **and press**  **to turn on the P-touch in Transfer mode.** A dialog box appears, indicating that the printer driver has been installed.
- 3 Click “Finish”.

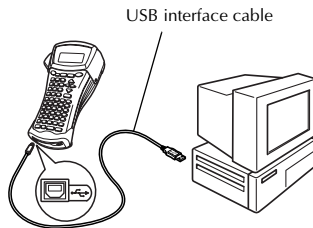


 If a dialog box appears, indicating that the installation is finished and suggesting that the computer be restarted, select the option for restarting the computer, click “Finish” to restart the computer, and then remove the CD-ROM from the CD-ROM drive.

With Windows® XP:

 A message appears, informing you that the printer driver has passed Brother's own compatibility tests and that “Continue Anyway” should be pressed if a warning message appears. Click “OK”

- 1 When the dialog box appears, informing you that the P-touch printer driver will be installed, click “Next”. A dialog box appears, instructing you to connect the P-touch to the computer.
- 2 Connect the P-touch to the computer using the enclosed USB interface cable, and then **hold down**  **and press**  **to turn on the P-touch in Transfer mode.** The first “Found New Hardware Wizard” dialog box appears.



- 3 Select “Install the software automatically (Recommended)”, and then click “Next”. A dialog box appears, warning that the software has not passed Windows® Logo testing.



- 4 Click “Continue Anyway” to continue with the installation. A “Found New Hardware Wizard” dialog box appears, indicating that the Found New Hardware Wizard has finished installing the printer driver for the P-touch.

- 5 If a “Driver Setup” dialog box appears, indicating that the printer driver has been installed, click “Finish”.



- 5 Click “Finish”. A dialog box appears, indicating that the installation is finished.
- 6 Select “Yes, I want to restart my computer now.” (or “Yes, restart immediately” if the printer driver was installed separately), click “Finish” to restart the computer, and then remove the CD-ROM from the computer.

- 7 To uninstall the printer driver, start up the installer on the CD-ROM, click the Driver button in the dialog box that appeared, and then select the desired option and follow the instructions that appear.

Reading the User's Guide

The P-touch Editor User's Guide can be viewed either by inserting the CD-ROM into the drive each time you wish to refer to it or by installing it onto your computer so that it is quickly available at any time. Since the User's Guide is an HTML document, a browser is needed to read it.

To view the User's Guide from the CD-ROM:

- 1 Start up Windows® Explorer.
- 2 Select the CD-ROM drive.
- 3 Double-click the Ptouch folder
- 4 Double-click the Manual folder
- 5 Double-click "Main.htm".

To view the User's Guide installed on the hard disk:

- 1 Click "Start" in the taskbar to display the Start menu.
- 2 Point to "Programs".
- 3 Point to "P-touch Editor 3.2".
- 4 Click "The User's Guide P-touch Editor 3.2".

Using P-touch Editor 3.2

P-touch Editor 3.2 makes it easy for anyone to design and print more complex labels for almost any need imaginable.

Notes on creating templates

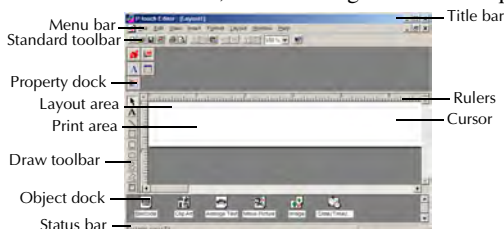
Since some P-touch Editor 3.2 functions are not available with the P-touch machine, keep the following points in mind when using P-touch Editor 3.2 to create templates.

- ☞ Since only the Helsinki font is available on the P-touch machine, the font used to print the text may be different from the font selected for the template in P-touch Editor. In addition, since the size of all text on the P-touch machine is set to **AUTO**, the text size may automatically be reduced.
- ☞ Although character styles can be applied to individual characters with P-touch Editor, styles can only be applied to a line of text with the P-touch machine. In addition, some character styles are not available on the P-touch machine.
- ☞ Differently from P-touch Editor, the P-touch machine cannot print underline or strikeout.
- ☞ Only the first 999 lines of a database linked to a template is read by the P-touch machine.
- ☞ Only the first line of text typed into a database field is read by the P-touch machine. Therefore, if you wish to print from a database with more than one line of text, create the template and database with separate fields for each line of text.
- ☞ Some characters available with P-touch Editor are not available with the P-touch machine.
- ☞ Bar codes specified with settings not compatible with the P-touch bar codes settings will not print correctly.
- ☞ A template created with P-touch Editor should have a fixed length with a maximum of 1 m.
- ☞ The template and database should be created so that no more than approximately 500 characters per label will be printed.
- ☞ Fields that extend out of the print area may not print completely.
- ☞ A numbering field specified with P-touch Editor will not transfer and is not compatible with the **Numbering** function on the P-touch machine.
- ☞ Backgrounds specified with P-touch Editor are not compatible with the P-touch machine.
- ☞ Time and date objects using the “At Printing” setting on P-touch Editor will not be printed.
- ☞ The printed label may differ from the image that appears in the Preview area of Transfer Manager.
- ☞ If the number or order of fields in a database are changed and only the database (*.csv file) is transferred to update it, the database may not link correctly with the template. In addition, the first line of data in the transferred file must be recognized by the P-touch machine as “field names”, otherwise the database cannot be used to print.
- ☞ A P-touch Editor layout that uses the split printing function (enlarging the label and printing it on 2 or more labels) cannot be transferred.
- ☞ The length of the label set with P-touch Editor and the label length setting on the P-touch may be slightly different as a result of the P-touch’s computational margin of error.

Starting up P-touch Editor 3.2

- 1 Click “Start” in the taskbar to display the Start menu.
- 2 Point to “Programs”.
- 3 Point to “P-touch Editor 3.2”.
- 4 Click “P-touch Editor 3.2”.

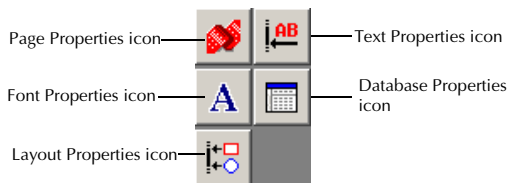
When P-touch Editor is started, the following window is displayed.



Displaying the Properties

Although the screens shown in the following explanations are for Windows® 98, 98 SE and Me, the operations for Windows® 2000 and XP are the same unless specifically mentioned.

The desired Properties can be displayed by clicking the icon in the property dock.



Page Properties ()

When the P-touch is selected as the printer:

Click this button to
hide the Properties.



Entering text

 Although the screens shown in the following explanations are for Windows® 98, 98 SE and Me, the operations for Windows® 2000 and XP are the same unless specifically mentioned.

- 1 Click  (Text button) on the draw toolbar.
Text can be typed in, and the pointer changes from  (selection pointer) to  (I-beam pointer).
- 2 Move the I-beam pointer to the position in the layout area where you wish to type in text, and then click the left mouse button. The cursor flashes in the layout area to indicate that you can now type in text.
- 3 Use the computer keyboard to type in the text.
- 4 To create a new line of text, press the keyboard's Enter key.

 With P-touch Editor 3.2, text is always typed in using the insert mode. The overwrite mode cannot be used to type in text.

 To change the font and text size, click the appropriate icon in the property dock, and then select the desired settings from the Properties that appear.

 For details, refer to *Reading the User's Guide* on page 46.

Notes on usage

Bar codes

Keep the following points in mind when using P-touch Editor 3.2 to print bar codes.

- Bar code readers may not be able to read bar codes printed with certain ink colours on certain label tape colours.
- Be sure to test the bar code reader to make sure that it can read printed bar codes in the environment where you plan to use them.
- The bar codes protocols that can be used are limited to those available with the P-touch. Refer to page 19 for a list of the available bar code protocols.

Databases

Keep the following points in mind when using the database functions of P-touch Editor 3.2.

For general details, refer to the User's Guide supplied on the P-touch Editor 3.2 CD-ROM.

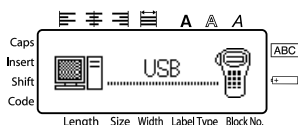
- The database function of P-touch Editor 3.2 uses database files that are compatible with Microsoft Access 97. By upgrading P-touch Editor 3.2 using a program available on the CD-ROM, P-touch Editor will become compatible with Access 2000. If P-touch Editor 3.2 has not been updated to Access 2000 during installation, refer to the Readme file located at Ptouch\Eeditor\Ac2k on the CD-ROM, and start up the program.
- P-touch Editor 3.2 can import files other than .mdb files, such as .csv files. Files saved as .csv files with an application such as Microsoft Excel can be used with P-touch Editor. Refer to the User's Guide supplied on the P-touch Editor 3.2 CD-ROM for more details.
- Using a function available with Microsoft Access 97, Excel files can be linked to .mdb files. With this function, data changed in Excel is automatically updated with P-touch Editor.

Transferring Data To/From a Computer

A template, database or a user-defined character image (character not available on the P-touch) can be transferred from the computer and assigned to a PF key on the P-touch.

Entering Transfer mode

- Hold down **Code** and press **On/Off** to turn on the P-touch in Transfer mode.

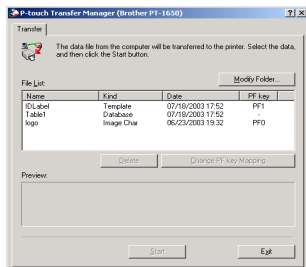


- To exit Transfer mode, press **On/Off** to turn off the P-touch.
- **Be sure not to turn off the P-touch while data is being set to it, otherwise the data will be lost.**
- Regardless of whether the P-touch is being operated from batteries or the AC adapter, the machine will automatically turn off if no key is pressed or no operation is performed for 5 minutes.

Downloading data to the P-touch

 Although the P-touch can be connected to the computer through a USB connection, label layouts created in P-touch Editor cannot be printed directly from the application.

- 1 Make sure that the P-touch is in Transfer mode. (For more details, refer to *Entering Transfer mode* on page 50.)
- 2
 - For downloading a template or database to the P-touch, start P-touch Editor 3.2. and open the template (and database) file.
 - Click [Transfer Template] command on the [File] menu to convert the layout file to a P-touch template format and start up Transfer Manager.
- 3 For a user-defined character image, point to “Programs” on the Start menu, point to “P-touch Editor 3.2”, and then click “Transfer Manager”.
- 4 From the File List, select the data that you wish to transfer.



 If the desired data is not listed in the File List, click “Modify Folder”. In the “Browse For Folder” dialog box that appears, select the folder containing the desired data, and then click “OK”.

- 5 For each template or a user-defined character image that you want transferred, click “Change PF Key Mapping”, and then select the PF key where you wish to assign the data.
- 6 Click “Start” to begin transferring the data. A dialog box appears, indicating that the data is being transferred.
- 7 When the message “The transfer was completed successfully.” appears, click “OK”.
- 8 On the P-touch, press  to exit Transfer mode and turn off the P-touch.

- ✎ The P-touch can only contain one database at a time. However, the database can be replaced or updated.
- ✎ When data is downloaded to a PF key, it replaces the preset template initially available on the P-touch. To restore the initial templates, use Transfer Manager to download the *.pd3 files from the folder located at \etc\Transfer in the P-touch Editor folder.
- ✎ Only one character image or template can be assigned to a PF key. If a character image or template is already assigned to a PF key, the previous data is erased when a different character image or template is transferred.
- ✎ Only the files that are selected will be transferred. To transfer more than one file at the same time, hold down the keyboard's Ctrl key, and then click the name of each file that you wish to transfer.
- ✎ To stop transferring the data, click "Cancel" in the dialog box that appears during transfer.

Adding a user-defined character image to the text

If a user-defined character image (a bitmap character not usually available on the P-touch) is assigned to a PF key, that character can be added to any label that you create on the P-touch.

- Press **Code**, then the applicable PF key.
The character is added to the text at the cursor's position.



- ✎ Only a monochrome bitmap (*.bmp) file can be transferred to the P-touch.
- ✎ A high-resolution file can be cut from a file with the specifications described above.
- ✎ The downloaded image is automatically resized to the width of the tape being used.

Using template data

A label layout created with P-touch Editor (*.lbl file) can be downloaded to the P-touch, where it can be used as a template for printing labels. The templates can be printed using text either from a database or text directly typed in.

When a database (*.mdb file created with P-touch Editor 3.2 or *.csv file) is downloaded to the P-touch, data from selected records can be added to labels either using a template linked to the database or using a new template. In addition, the database data can be searched to find specific records.

☞ The P-touch can only contain one database at a time. However, the database can be replaced or updated.

Using a template not linked to a database

Using a template not linked to a database is the same as using any of the preset Auto Format templates. For details on using Auto Format templates, refer to *Using the pre-formatted Auto Format templates* on page 30.

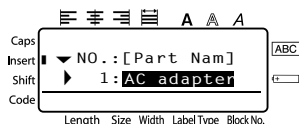
Using a template linked to a database

A single record or a range of records in the database linked to the template can be printed.

- 1 Press **Code**, then the PF key where the template that you wish to use is assigned.
- 2 Press **New Block**. The database data is displayed.

To select a single database record to be printed in the template:

- 3 Press **Home** or **End** to highlight the desired record, and then press **New Block**.
- 4 To edit any text in the record, press **Home** or **End** to display the text, and then type in the new text.
- 5 Press **Print**.



To select a range of database records to be printed in the template:

- 3 Press **Home** or **End** to highlight a record, and then press **New Block**.
- 4 Press **Code**, then **Print Option**. The message “CLEAR TEXT & PRINT DATABASE?” appears.
- 5 Press **New Block**.
- 6 Press **Left Arrow** or **Right Arrow** until **RECORD NO.** is displayed, and then specify the desired range of records.
- 7 Press **New Block** (or **Print**). **START** appears in the Print Option menu.
- 8 Press **New Block** (or **Print**) to begin printing the labels using the specified range of records.

- ✎ If the Cut function is set to **1** or **3**, the message “CUT TAPE TO CONTINUE” appears after each label is printed. Press the tape cutter button to cut off the label and continue printing.
- ✎ Be sure to cut the tape within 5 minutes from the time that the message appears.
- ✎ For the different options available for cutting the tape, refer to *Selecting how tape is fed and cut* on page 38.
- ✎ To search for a specific record while the database data is displayed (in step ② above), refer to *Searching the database* on page 56.
- ✎ To view other fields in the record selected in step ③, press  or .
- ✎ When editing data as described in step ④ of the procedure for printing a single database record, the database remains unchanged. When printing a range of database records, the text cannot be edited.
- ✎ To specify settings for additional Print Option functions, instead of continuing with step ⑧, press  or  until **CONTINUE** is displayed in the Print Option menu, and then press . (Refer to *Printing multiple copies of a label* on page 32 and *Printing mirrored labels* on page 34.)
- ✎ To quit using the template, display the last field, and then press . The template menu appears. Press  or  until **EXIT** appears, and then press .
- ✎ While trying to print a large amount of data at one time, some outputted labels may be blank. For example, when printing 50 records, the maximum number of characters that can be printed at one time is limited to approximately 200.

Using downloaded database data

Either an *.mdb database, created with P-touch Editor 3.2, or a database converted to a *.csv file can be transferred to the P-touch. The database data can be used either with a template or added to a label created on the P-touch without using a template.

Adding database data to a label

- ① Move the cursor to place in the text where you wish to add the database data.
- ② Press , then .
- ③ Press  or  until the record containing the desired data is flashing.
- ④ Press  or  until the desired data is flashing.
- ⑤ Press . The selected data is added to the label text.

- ✎ To search for a specific record, refer to *Searching the database* on page 56.

Using database data in a Label Type mode

This function enables you to select the range of database fields to print.

- ① Press , and then select the Label Type mode as described in chapter 2.
- ② Press , then . The message “CLEAR TEXT & PRINT DATABASE?” appears.
- ③ Press .
- ④ Press  or  until **RECORD NO.** is displayed, and then specify the desired range of records.
- ⑤ Press  or  until **FIELD NO.** is displayed, and then specify the desired range of record fields.
- ⑥ Press  (or ). **START** appears in the Print Option menu.
- ⑦ Press  (or ) to begin printing the labels using the specified range of records.

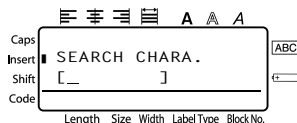
-  If label text has been typed in, you will be asked to choose either **TEXT PRINT** or **DATA PRINT** when , then  is pressed. At this time, select **DATA PRINT**. If **TEXT PRINT** is selected, the special printing functions for printing multiple copies of labels (refer to page 32), printing multiple copies with incremental characters (refer to page 32), printing a range of text blocks (refer to page 34), or printing the label text as a mirror image (refer to page 34) are available.
-  To specify settings for additional Print Option functions, instead of continuing with step ⑦, press  or  until **CONTINUE** is displayed in the Print Option menu, and then press . (Refer to *Printing multiple copies of a label* on page 32 and *Printing mirrored labels* on page 34.)
-  While trying to print a large amount of data at one time, some outputted labels may be blank. For example, when printing 50 records, the maximum number of characters that can be printed at one time is limited to approximately 200.

Searching the database

While selecting a database record to be used in a template or while selecting a database record whose data is to be added to a label, the database can be searched for records containing specific characters or records with a specific number.

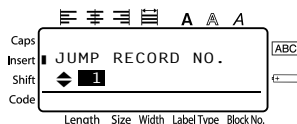
To search the database for a record containing specific characters:

- 1 Press **Code** and **Space** until the search screen is displayed.
- 2 Type in the characters that you wish to search for.
- 3 Press **New Block** . The first record after the currently selected one that contains the entered characters appears.



To display a record with a specific number:

- 1 Press **Code** and **Space** until the jump screen is displayed.
- 2 Press **Home**  or **End**  until the desired record number is displayed, or use the number keys to type in the desired number.
- 3 Press **New Block** . The record with the specified record number appears.

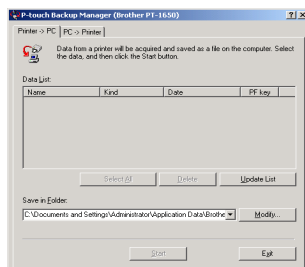


Backing up/restoring P-touch data

Backup Manager, which was installed with P-touch Editor 3.2, enables you to save the following types of data from the P-touch onto the computer as a backup in case the P-touch data is lost. In addition, the data backed up onto the computer can be restored onto the P-touch.

- Label templates
- Database
- User-defined character images
- Label files stored in the P-touch memory

- 1 Make sure that the P-touch is in Transfer mode. (For more details, refer to *Entering Transfer mode* on page 50.)
- 2 On the Start menu, point to “Programs”, point to “P-touch Editor 3.2”, and then click “Backup Manager”.
- 3 To back up P-touch data onto the computer, click the Printer → PC tab, and then click “Update List”.
To restore P-touch data backed up on the computer, click the PC → Printer tab.
- 4 From the File List, select the data that you wish to back up or restore.
- 5 Click “Start”. A dialog box appears, indicating that the data is being transferred.
- 6 When the message “The transfer was completed successfully.” appears, click “OK”.



- ☞ Only the selected data will be backed up or restored. To select more than one file, hold down the keyboard's Ctrl key, and then click the names of the desired files.
- ☞ To select all data, click “Select All”.
- ☞ To stop transferring the data, click “Cancel” in the dialog box that appears during transfer.
- ☞ To restore data to a different PF key, click “Change PF Key Mapping” on the PC → Printer tab, and then select the PF key where you wish to assign the data.
- ☞ Only one character image or template can be restored to a PF key. If a character image or template is already assigned to a PF key, the previous data is erased when a different character image or template is transferred.

6 Appendix

Troubleshooting

Problem	Solution
1 The display stays blank after you have turned on the machine.	• Check that the AC adapter (model AD-3000/PT) is connected correctly. • If you are using batteries, check that they are correctly inserted. • If the batteries are low, replace them with new ones.
2 The machine does not print or the printed characters are blurred.	• Check that the back cover has been properly attached. • If the tape cassette is empty, replace it with a new one.
3 The text files that you stored in the memory are no longer there.	• If the batteries are low, replace them with new ones.
4 The printed characters are not formed properly.	• If you are using batteries, they may have a low charge. Try using the AC adapter or replace the batteries with new ones.
5 A blank horizontal line appears through the printed label.	• Clean the print head as explained on <i>Cleaning the print head, rollers and tape cutter</i> on page 8.
6 Striped tape appears.	• You have reached the end of the tape. Replace the tape cassette with a new one.
7 The P-touch has “locked up” (i.e., nothing happens when a key is pressed).	• Turn off the P-touch, and then while holding down Code and R, turn the machine back on. The machine will restore, but the text and formats shown in the display and all text files stored in the memory are erased.

Error Message List

Error Message	Cause	Solution
1 BLOCK LIMIT!	This message appears if you try to use the Numbering function when multiple blocks of text have been entered with the PANEL Label Type mode selected.	- Cancel the Numbering function. - Limit the number of text blocks to 1.
7 LINE LIMIT!	This message appears if 7 lines have already been entered in a text block when you press .	Limit the number of lines in a text block to 7.
	This message appears if you delete , causing the number of lines in a block to exceed the 7-line limit.	Adjust the number of lines so that the block will not have more than 7 lines.
50 LINE LIMIT REACHED!	This message appears if 50 text blocks have already been entered when you press , then .	Limit the number of text blocks to 50.
BUFFER EMPTY!	This message appears if no text has been typed in when you try to print or Preview function.	Type in some text before trying to perform any of these operations.
BUFFER FULL!	This message appears if you try to add a character, a space, a new line, a new block, a symbol, an accented character or a bar code after the maximum number of characters has already been entered.	Delete some existing text before trying to add any more.
CASSETTE CHANGED!	This message appears if the tape cassette was changed while the P-touch paused for the tape to be cut.	Change the tape cassette back again.
CHECK BATTERIES!	This message appears if a combination of new and used batteries, a combination of batteries of different types (alkaline, Ni-Cd and Ni-MH), manufacturers or models, or a combination of recharged and uncharged batteries have been installed.	- Replace the batteries with six new AA batteries of the same type. - If rechargeable batteries are installed, recharge all batteries.

Error Message	Cause	Solution
CHECK SETTING IN LABEL TYPE MODE!	This message appears if you try to change the settings for the Length function or Frame function after a Label Type mode with a preset label length or frame has already been selected.	Select a different Label Type mode.
On 18 mm tape: CHECK THE NUMBER OF LINES! 5 MAX On 12 mm tape: CHECK THE NUMBER OF LINES! 3 MAX On 9 mm and 6 mm tape: CHECK THE NUMBER OF LINES! 2 MAX	This message appears if you try to print or use the Preview function when the number of lines in the text is greater than the maximum possible for the installed tape.	Reduce the number of lines or install a wider tape.
CHOOSE COPIES LESS THAN 1000!	- This message appears if more than 1000 copies were selected with the Print Option functions. - Note the number of copies plus the number of sequential labels cannot exceed 1000.	Select less than 1000 copies.
CUTTER ERROR!	This message appears if the tape cutter button was pressed in when Print was pressed or the tape was being fed.	- Release the tape cutter button. If Print was pressed, press Feed to feed out any printed tape. - If the problem cannot be corrected, contact your service representative.
IMAGE CHARACTER SIZE ERROR! (for PT-1650 only)	This message appears if a wide user-defined character image is entered when the Vertical Label Type mode is selected.	Change the Label Type mode or use a tall user-defined character image.
INPUT WHOLE CODE!	This message appears if the required number of digits is not entered in the bar code data.	Input the correct number of digits or change the bar code protocol.

Error Message	Cause	Solution
INPUT ABCD AT BEGIN & END!	This message appears if a letter between A and D has not been entered at the beginning and end of the bar code data when the CODABAR protocol is selected.	Enter a letter between A and D at the beginning and end of the bar code data.
INSERT 24mm TAPE	This message appears if a 24-mm-wide tape cassette is not installed when printing an Auto Format template created for 24-mm-wide tape.	Install a 24-mm-wide tape cassette.
INSERT 18mm TAPE	This message appears if a 18-mm-wide tape cassette is not installed when printing an Auto Format template created for 18-mm-wide tape.	Install a 18-mm-wide tape cassette.
INSERT 12mm TAPE	This message appears if a 12-mm-wide tape cassette is not installed when printing an Auto Format template created for 12-mm-wide tape.	Install a 12-mm-wide tape cassette.
INSERT 9mm TAPE	This message appears if a 9-mm-wide tape cassette is not installed when printing an Auto Format template created for 9-mm-wide tape.	Install a 9-mm-wide tape cassette.
INSERT 6mm TAPE	This message appears if a 6-mm-wide tape cassette is not installed when printing an Auto Format template created for 6-mm-wide tape.	Install a 6-mm-wide tape cassette.
LENGTH LIMIT!	This message appears if you try to print or use the Preview function when the length of the text is greater than the 1 m limit.	Delete some of the text.
MEMORY FULL!	This message appears if you try to store a text file after approximately 2000 characters have already been stored in the memory.	Delete an unwanted file to make space for the new one.

Error Message	Cause	Solution
MIN 4 DIGITS!	This message appears if less than the minimum four digits are entered as the bar code data.	Enter a minimum of four digits before pressing .
NO FILES!	This message appears if no files are stored in the memory when you try to recall or delete one.	Store a text file before trying to recall or delete one.
NO DATABASE OR INCORRECT FORMAT (for PT-1650 only)	This message appears if no database has been downloaded to the P-touch when you press , then .	Download a database.
NO TAPE!	This message appears if no tape cassette is installed when you try to feed the tape, print or use the Preview function.	Install a tape cassette and try again.
RECORD NOT FOUND! (for PT-1650 only)	This message appears when the specified text or record number cannot be found in the database.	Try searching for different text or a different record number.
TEXT TOO HIGH! XX BLOCK	This message appears if the size of the text is larger than the width of the installed tape.	Reduce the size of the characters, install a tape with a greater width, or select the AUTO text size setting.
TEXT TOO LONG!	This message appears if the length of the text is longer than the label length that has been set with the Length function.	Press , and then select a longer label length.
TEXT TOO LONG! XX BLOCK	This message appears if you try to print a label that is longer than the specified block length.	Select a longer block length.
VALUE OUT OF RANGE!	- This message appears if the value entered while setting the Margin, Length, and Block Length function is not within the allowable range. - This message appears if the specified characters cannot be found in the database. - This message appears if the values for the blocks, records or fields to be printed is not within the allowable range.	Type in a value that is within the allowable range.

Machine Specifications

Hardware

Power supply:	Six AA alkaline batteries or Six AA rechargeable batteries or AC adapter (model AD-3000/PT)
Input device:	Keyboard (56 keys)
LCD:	48 × 132 dots + Caps and other indicators
Print tape:	TZ tape is available in the following five widths: 6 mm 9 mm 12 mm 18 mm 24 mm
Print head:	18.1 mm (height)/180 dpi (resolution)
Tape cutter:	Manual cutter
Dimensions (PT-1400):	With tape cutter button: 131 mm (W) × 235 mm (D) × 86mm (H) Without tape cutter button: 114 mm (W) × 235 mm (D) × 86mm (H)
Weight (PT-1400):	560 g
Dimensions (PT-1650):	With tape cutter button: 133 mm (W) × 239 mm (D) × 87 mm (H) Without tape cutter button: 116 mm (W) × 239 mm (D) × 87 mm (H)
Weight (PT-1650):	615 g

Software

Character fonts:	1 built-in font (Helsinki)
Character sizes:	AUTO plus 7 point sizes (1, 2, 3, 4, 6, 9 and 12 mm (6, 9, 12, 18, 24, 36 and 48 points))
Character styles:	Normal, Bold, Outline, Italic, Italic + Bold, and Italic + Outline
Buffer size:	Maximum 512 characters Maximum 7 lines Maximum 50 blocks
Memory size:	Approximately 2000 characters

Accessories

● Supplies

Brother only recommends the use of genuine Brother accessories (AC adapters, TZ Tapes) designed exclusively for this product. The use of non-genuine accessories may result in print quality issues and may damage your Brother product. Any such damages resulting from the use of non-genuine accessories will not be covered by warranty. Brother can only recommend the use of genuine Brother accessories in Brother products to ensure the operation is within the product design and specifications.

Genuine accessories are obtainable through your nearest Authorised Brother Reseller.

(Only for Australia)

Nothing contained in this statement shall be deemed to restrict any warranty required to be given under the Trade Practices Act (Commonwealth of Australia) or any consumer legislation of any state of Australia.

Stock No.	Description
24 mm laminated tapes	
TZ-151	Black characters on clear adhesive
TZ-M51	Black characters on clear (matt) adhesive
TZ-M951	Black characters on silver (matt) adhesive
TZ-251	Black characters on white adhesive
TZ-451	Black characters on red adhesive
TZ-551	Black characters on blue adhesive
TZ-651	Black characters on yellow adhesive
TZ-751	Black characters on green adhesive
TZ-C51	Black characters on fluorescent yellow adhesive
TZ-B51	Black characters on fluorescent orange adhesive
TZ-D51	Black characters on fluorescent green adhesive
TZ-152	Red characters on clear adhesive
TZ-252	Red characters on white adhesive
TZ-153	Blue characters on clear adhesive
TZ-253	Blue characters on white adhesive
TZ-354	Gold characters on black adhesive
TZ-155	White characters on clear adhesive
TZ-355	White characters on black adhesive
TZ-455	White characters on red adhesive
TZ-555	White characters on blue adhesive
TZ-655	White characters on orange adhesive
TZ-755	White characters on green adhesive

Stock No.	Description
18 mm laminated tapes	
TZ-141	Black characters on clear adhesive
TZ-143	Blue characters on clear adhesive
TZ-M941	Black characters on silver (matt) adhesive
TZ-241	Black characters on white adhesive
TZ-242	Red characters on white adhesive
TZ-243	Blue characters on white adhesive
TZ-344	Gold characters on black adhesive
TZ-345	White characters on black adhesive
TZ-441	Black characters on red adhesive
TZ-541	Black characters on blue adhesive
TZ-641	Black characters on yellow adhesive
TZ-741	Black characters on green adhesive
12 mm laminated tapes	
TZ-131	Black characters on clear adhesive
TZ-132	Red characters on clear adhesive
TZ-133	Blue characters on clear adhesive
TZ-135	White characters on clear adhesive
TZ-231	Black characters on white adhesive
TZ-232	Red characters on white adhesive
TZ-233	Blue characters on white adhesive
TZ-334	Gold characters on black adhesive
TZ-335	White characters on black adhesive
TZ-431	Black characters on red adhesive
TZ-435	White characters on red adhesive
TZ-531	Black characters on blue adhesive
TZ-535	White characters on blue adhesive
TZ-631	Black characters on yellow adhesive
TZ-635	White characters on orange adhesive
TZ-731	Black characters on green adhesive
TZ-735	White characters on green adhesive
TZ-B31	Black characters on fluorescent orange adhesive
TZ-C31	Black characters on fluorescent yellow adhesive
TZ-D31	Black characters on fluorescent green adhesive
TZ-M31	Black characters on clear (matt) adhesive
TZ-M931	Black characters on silver (matt) adhesive

Stock No.	Description
9 mm laminated tapes	
TZ-121	Black characters on clear adhesive
TZ-122	Red characters on clear adhesive
TZ-123	Blue characters on clear adhesive
TZ-125	White characters on clear adhesive
TZ-221	Black characters on white adhesive
TZ-222	Red characters on white adhesive
TZ-223	Blue characters on white adhesive
TZ-324	Gold characters on black adhesive
TZ-325	White characters on black adhesive
TZ-421	Black characters on red adhesive
TZ-521	Black characters on blue adhesive
TZ-621	Black characters on yellow adhesive
TZ-721	Black characters on green adhesive
TZ-M21	Black characters on clear (matt) adhesive
6 mm laminated tapes	
TZ-111	Black characters on clear adhesive
TZ-211	Black characters on white adhesive
TZ-315	White characters on black adhesive
TZ-611	Black characters on yellow adhesive

Strong adhesive tapes

Stock No.	Description
TZ-S251	24 mm Black characters on white strong adhesive tape
TZ-S241	18 mm Black characters on white strong adhesive tape
TZ-S231	12 mm Black characters on white strong adhesive tape
TZ-S221	9 mm Black characters on white strong adhesive tape
TZ-S211	6 mm Black characters on white strong adhesive tape

Flexible ID tapes

TZ-FX251	24 mm Black characters on white flexible ID tape
TZ-FX241	18 mm Black characters on white flexible ID tape
TZ-FX231	12 mm Black characters on white flexible ID tape
TZ-FX221	9 mm Black characters on white flexible ID tape
TZ-FX211	6 mm Black characters on white flexible ID tape
TZ-FX151	24 mm Black characters on clear flexible ID tape
TZ-FX141	18 mm Black characters on clear flexible ID tape
TZ-FX131	12 mm Black characters on clear flexible ID tape
TZ-FX121	9 mm Black characters on clear flexible ID tape
TZ-FX111	6 mm Black characters on clear flexible ID tape
TZ-FX651	24 mm Black characters on yellow flexible ID tape
TZ-FX641	18 mm Black characters on yellow flexible ID tape
TZ-FX631	12 mm Black characters on yellow flexible ID tape
TZ-FX621	9 mm Black characters on yellow flexible ID tape
TZ-FX611	6 mm Black characters on yellow flexible ID tape

Special tapes

Stock No.	Description
TZ-IY41	18 mm iron-on transfer tape
TZ-SE4	18 mm security tape
TZ-FA3	12 mm Blue characters on white fabric tape
TZ-FAE3	12 mm Blue characters on pink fabric tape
TZ-FA53	12 mm Blue characters on blue fabric tape
TZ-FA63	12 mm Blue characters on yellow fabric tape

Options

Stock No.	Description
TZ-CL4	Head & Roller cleaner
AD-3000/PT	AC Adapter

Index

A

AC adapter	9
Accent function	18
alignment	29
arrow keys.....	2, 3, 15, 16
Auto Format function	30
Auto Format keys	2
Auto Reduction function	39

B

backspace key.....	2, 3, 15, 18
Backup Manager	57
bar code	
special characters	20
Bar Code function	19
batteries	5
block number.....	2, 3
block range	34
bold text style.....	28
indicator	2, 3

C

cancelling	15
Caps indicator	2, 3
Caps mode	16
center text alignment.....	29
indicator	2, 3
chain printing.....	38
character	
size.....	26
style.....	28
width.....	27
choosing	15
default setting	15
cleaning	
print head.....	8
rollers	8
tape cutter	8

Clear function	18
Code indicator	2, 3
confirming.....	15
Contrast function	38
copies	32
cursor	16
Cut function	38
cut-pause	38

D

database record range	53
databases	53, 54
Label Type mode.....	55
searching.....	56
default setting.....	15
deleting	
memory files.....	37
text	18
display	2
contrast	38

E

error messages.....	59
---------------------	----

F

Feed key.....	2, 3, 31
Flag mode	12
Flexible ID Tape.....	7
Format key	26, 27, 28
formatting.....	26, 27, 28
Frame function	25
frame indicator.....	2, 3

G

global format key	2, 3
global formatting	
character size	26
character style	28
character width	27

I

indicators	2
block number	2, 3
bold text style	2, 3
Caps	2, 3
center text alignment	2, 3
Code	2, 3
frame	2, 3
Insert	2, 3
italic text style	2, 3
justified text alignment	2, 3
Label Type setting	2, 3
left text alignment	2, 3
length	2, 3
low battery	2, 3
outline text style	2, 3
right text alignment	2, 3
Shift	2, 3
size	2, 3
width	2, 3
Insert indicator	2, 3
Insert key	17
installing	
printer driver	44
P-touch Editor	42
italic text style	28
indicator	2, 3

J

justified text alignment	29
indicator	2, 3

K

keyboard	2
----------------	---

L

label margins	24
Label Type key	2, 3
Label Type mode	10
databases	55
Label Type setting indicator	2, 3
language	40
LCD display	2
left text alignment	29
indicator	2, 3
length adjustment	39
Length function	24
length indicator	2, 3
local formatting	
character size	26
character style	28
character width	27
locked up	58
low battery indicator	2, 3
lowercase letters	16

M

Margin function	24
measurements	40
Memory key	36
mirror printing	34

N

New Block function	17
Normal mode	10
Numbering function	32
numbers	16

O

outline text style	28
indicator	2, 3

P

Panel mode	13
PERSONAL symbol category	23
setup	40
PF keys	3
Port Block mode	13
Port mode	13
power key	2, 3, 9
preview	31
print head	8
Print key	2, 3, 31
printer driver	
installing	44
printing	
database record range	53
text block range	34
problems	58
P-touch Editor	
installing	42
starting	47
template	52
User's Guide	46

R

recalling	37
Repeat Printing function	32
restoring	57
return key	2, 3, 15, 17
right text alignment	29
indicator	2, 3
rollers	8
Rotate & Repeat mode	11
Rotate mode	11

S

searching	56
selecting	15, 16
default setting	15
Setup key	38
Shift indicator	2, 3
Shift mode	16

size	26
indicator	2, 3
Space key	15, 16
storing	36
Strong Adhesive Tape	7
style	28
Symbol key	21

T

tape	
cassettes	5
cutter	8
templates	
Auto Format	30
P-touch Editor	52
text	
alignment	29
size	26
size adjustment	39
style	28
width	27
width adjustment	39
Transfer Manager	51
Transfer mode	50
troubleshooting	58

U

units	40
uppercase letters	16
USB connection	44
user-defined character image	52

V

version	40
Vertical mode	10

W

width	27
indicator	2, 3

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